THE

# Medical Miſcellany:

Or a COLLECTION of

## Caſes, Tracts, *and* Commentaries;

EXHIBITING

A VIEW of the PRESENT STATE

OF

MEDICAL *and* CHIRURGICAL PRACTICE *and* LITERATURE in *England.*

---

By T. TOMLINSON.

---

*Cum conſtemus ex animo & corpore, corporis curandi tuendique cauſa quæſita ſit ars ejus atque utilitas deorum immortalium inventioni conſecrata.* CIC. TUSC. QUÆST.

---

LONDON:

Printed for the Author; and ſold by W. NICOLL, in St. *Paul's* Church-yard, *London*; and Meſſrs. PEARSON and ARIS, in *Birmingham.* 1769.

## ERRATA.

Page 6, for indiſputedly, *read* indiſputably
Page 14, for pefection, *read* perfection.
Page 19, 30, 34, for proſtrate, *read* proſtate.
Page 29, line 24, for fol- *read* following.
Ditto line 30, after dolor, *add* mitt. hauſt. iv.
Page 93, line 34, dele i. e. and for to, *read* ſhould.
Ditto line ult. for vol. 1. *read* vol. 2. (Mihles's Tranſ.)
Page 180, line 11, *dele* a.

BRITISH MUSEUM

300

TO

CÆSAR HAWKINS, Eſq;

SERJEANT SURGEON

TO HIS MAJESTY,

AND

SENIOR SURGEON

TO ST. GEORGE'S HOSPITAL;

This VOLUME of the

# Medical Miſcellany,

Is inſcribed as a Teſtimony of Gratitude and Reſpect,

*By his moſt obliged,*

*humble Servant,*

BIRMINGHAM,
July 1, 1769.

T. Tomlinſon.

TO

CESAR HAWKINS, Esq.;

SERJEANT SURGEON

To His Majesty,

AND

SENIOR SURGEON

To St. George's Hospital;

THIS VOLUME of the

# Medical Miscellany,

Is inscribed as a Testimony of Gratitude
and Respect,

By his most obliged,

Humble Servant,

T. Tomlinson.

# PREFACE.

THE apology of writing for the uſe of the juniors in the profeſſion, however trite and common, will I hope exempt the author from the ſeverity of criticiſm as well as the charge of preſumption. He hath now thought proper to prefix his name to his work, though contrary to his firſt deſign, (as expreſſed in the introduction wrote above a year ago. How much his labours can conduce to the important end of promoting medical literature, he pretends not to ſay; but he will venture to declare, that he has advanced no one ſentiment but what is founded (to the beſt of his knowledge and underſtanding) upon the moſt reſpectable authority, that of facts.

Whatever may be the ſucceſs or the execution of his plan, the author remains convinced of its utility: and he wiſhes that ſome other gentlemen would join with him in the ſame intention of communicating medical intelligence, either in this or in any other form judged more eligible. A ſociety might be eſtabliſhed for this purpoſe, and the members of it, however diſtant from each

each other, aſſiſt in the general deſign by means of correſpondence: thoſe gentlemen who are willing to concur in this ſcheme are requeſted to ſignify their intentions by letters to the author.

The continuation of this work depends upon the reception it meets with from the public, and the aſſiſtance of correſpondents, which he earneſtly ſolicits.

The author cannot conclude without expreſſing his thanks for the civilities and encouragement received from the gentlemen of the faculty in this town, in reſpect to the anatomical lectures.

Some particular obligations are due to Doctor *Aſh*, and Doctor *Small*; to Mr. *Hector*, and Mr. *Parrott*, Surgeons. The friendſhip and intimacy with which he is honoured by theſe gentlemen, have given him opportunities of profiting by their judicious remarks and unreſerved converſation: and the author hopes they will aſcribe this public mention of their names to the gratitude and reſpect he owes them.

BRITISH 22 AP 87 MUSEUM

CON-

# CONTENTS.


INtroduction,
Obſervations on the adheſion of the Placenta, and the danger of forcibly extracting it, 1
Remarkable caſes of inflammation of the bladder and ſuppreſſion of urine, with the method of cure, 15
Obſervations on the conſtitution of the air and the prevailing diſeaſes in 1767, 34
Commentaries on new medical books, viz. Dr. *Baker*'s Eſſay on the Endemial Colic of *Devonſhire*: Obſervations on Dr. *Baker*'s Eſſay, by Mr. *Geach*: An Anſwer to Mr. *Geach*, by Dr. *Saunders*: Mr. *Kirkland*'s Eſſay on Fevers, 43
Obſervations on the Paronychia, illuſtrated by caſes, 59
Of a fever from obſtructed perſpiration, and of a plethora, 81
Fatal effects from a ſchirroſity of the proſtate gland and the bladder, 109
An unſucceſsful amputation, 117
Medical problems or queſtions, 122
Good effects of the cicuta in a diſeaſed eye-lid, 125
A fatal flooding caſe and adheſion of the placenta, 127
Commentaries on new medical books, viz. A Review of the Venereal Diſeaſe and its Remedies by *W. Fordyce*, Surgeon. Eſſays, &c. by Dr. *Biſſet*. Practical Directions, by Dr. *Harvie*. London Medical Enquiries and Obſervations, vol. 3. Dr. *Macbride*'s New Method of curing the Sea Scurvy. Elements of the Practice of Phyſic, by *G. Fordyce*, M. D. Eſſays Medical and Experimental, by *T. Percival*, M. D. The Gout, by *D. Ingram*, Surgeon. A Treatiſe on Diet, by *F. de Velangin*, M. D. 129
Obſervations on the new method of inoculation, with caſes, and remarks on the books publiſhed on the ſame ſubject, 139
On internal abſceſſes, particularly of the pſoas muſcle, with various caſes, 165
Of compound fractures, with caſes, 180
State of diſeaſes at *Birmingham*, in 1768, 203
Epitome of anatomical lectures, delivered at *Birmingham*, 207
Of an uncommon tumour, 210
An Eſſay on Salep, by *J. F. Simmons*, 212
General remarks on the medical productions in 1768, 216


*A D-*

## *ADVERTISEMENT.*

*The author of the* Medical Miſcellany *begs leave to propoſe a Tranſlation of* Lieutaud's Synopſis, *which he thinks would be one of the moſt uſeful books for young ſtudents, and for all who delight in Medical reading, ever publiſhed in England. The great abilities of* Lieutaud *both as a phyſician and anatomiſt are equally conſpicuous. In the method of claſſing diſeaſes and in treating of them he has undoubted merit; being at the ſame time conciſe and full, founding his ſyſtem upon reaſon and experience. This intended tranſlation of the* Synopſis Univerſæ Praxeos-Medicæ, *(with occaſional notes by the tranſlator) comprehending an account of all diſeaſes, will form two handſome octavo volumes, price ten ſhillings, to be publiſhed by ſubſcription.*

*Thoſe gentlemen who are willing to promote this uſeful work, are deſired to ſend their names and addreſs, to Mr.* W. Nicoll, *at* No 51, *in St.* Paul's *Church-yard,* London; *and to* A. Pearſon *and* S. Aris, *in* Birmingham.

THE

# Medical Miſcellany:

Or a COLLECTION of

## Caſes, Tracts, *and* Commentaries;

EXHIBITING

A VIEW of the PRESENT STATE

OF

Medical *and* Chirurgical Practice *and* Literature in *England*.

---

*Cum conſtemus ex animo & corpore, corporis curandi tuendique cauſa quæſita ſit ars ejus atque utilitas deorum immortalium inventioni conſecrata.*

Cic. Tuſc. Quæſt.

---

*LONDON:*

Printed for the Author; and ſold by W. NICOLL, in St. *Paul*'s Church-yard. 1768.

THE

# Medical Miscellany:

Or a COLLECTION of

## Cases, Tracts, and Commentaries;

EXHIBITING

A VIEW of the PRESENT STATE

OF

Medical and Chirurgical Practice and Literature in England.

---

*Cum constemus ex animo & corpore, corporis curandi tuendique causa quæsita sit ars ejus atque utilitas deorum immortalium inventioni consecrata.*

Cic. Tusc. Quæst.

---

LONDON:

Printed for the Author; and sold by W. NICOLL, in St. Paul's Church-yard. 1768.

# INTRODUCTION.

THE deſign of this work is to communicate to the public, from time to time, Caſes and Obſervations in Phyſic and Surgery, which the author hath collected either in the courſe of his own reading and practice, or which he may receive from the kind information of others. The ultimate end being to range in proper order ſuch materials as may afford amuſement and improvement to thoſe who are ſolicitous in promoting the honour and intereſt of the medical art, in all it various branches. But as the author is conſcious of his own inſufficiency to conduct an undertaking of this extenſive nature, in the manner he could wiſh without ſome aſſiſtance, he therefore begs leave to explain, as clearly and conciſely as poſſible, the method he propoſes to follow in this publication, that from the arrangement of the work gentlemen may better judge what part of it is moſt adapted to their reſpective taſte, and from thence take their choice in what manner to contribute towards the ſupport and continuation of this Miſcellany.

Upon conſidering the many difficulties that muſt unavoidably occur in ſyſtematical writing, difficulties, obvious both on account of the great variety of elaborate works already publiſhed, which

are, from their acknowledged merit, become the ſtandards by which our practice is regulated, and on account of his own inability, the author reſolved to exerciſe himſelf in an inferior department. Indeed it is often matter of extreme aſtoniſhment to him, on viewing the voluminous productions of ſome writers in phyſic, both antient and modern, to find that they had ſo much ſpare time to employ in compiling their works: either their genius muſt excel, or their manner of life muſt totally differ from the preſent; for now, even a moderate ſhare of practice, followed with that attention and aſſiduity which are daily requiſite to obtain ſucceſs and reputation, (interrupted as we are by various avocations in life, by ceremony and the cuſtoms of the world, and embarraſſed by oppoſition and difficulties) will hardly allow ſufficient time for any man to range his reflexions and obſervations in ſuch order as to aſſiſt even himſelf, in his future practiſe; much leſs is it to be expected that what he commits ſo haſtily to memory, can be rendered worthy the acceptance or the regard of the public.

For theſe and various other reaſons, the title of *Miſcellany* was thought moſt ſuitable to this undertaking; becauſe in a collection of this nature, which is not compoſed in any preciſe order or method, and which does not require great genius or depth of erudition, the author imagined he might with more advantage employ ſome portion

of

of his leiſure hours; and beſides, he could by this means give every gentleman an opportunity of obliging the public with ſuch caſes and obſervations as are deemed worth preſerving from oblivion: for it would be juſtly thought an abſurd preſumption in any one man, however eminent for genius, or improved by ſtudy or practice, to attempt carrying on, alone, for any long ſpace of time, a work whoſe eſſential merit conſiſts ſo much in variety. Either his ability, his time, or his facts muſt fail him; therefore, the continuation of this Miſcellany depends, in a great meaſure, upon the aſſiſtance of others. What materials the author hath already collected, will be offered to the public, till the whole ſtock is exhauſted, and if no ſupplies come in, the book muſt ſoon be cloſed.

The author having thus made known his deſign, and alſo confeſſed his weakneſs, yet preſumes to eſteem it a particular felicity, that the zeal which animates him in this labour, will not give him the leaſt uneaſineſs if he does not meet with ſucceſs. Indifferent as he is to fame, and not aiming at profit, but on the contrary incurring expence, he reſts his claim to encouragement upon his diſintereſtedneſs in both theſe points. So precarious does the attempt appear, even to his own underſtanding, that he hath not yet diſcovered his name or his intention even to his neareſt intimates; chuſing rather firſt to try what reception his ſcheme meets with from the world, than to in-

volve any friend in an unſucceſsful enterprize. Indeed the concealment of his name is prudent on many accounts: by ſome an author is conſidered as a term of reproach, by ſome of ridicule, and by others he is made an object of envy: beſides, when a man's name is known, his opinions frequently loſe their weight; nor can he ſafely exerciſe his genius with that freedom as is neceſſary, eſpecially if he ſhould call in queſtion eſtabliſhed cuſtoms, or errors (which are often times terms ſynonymous) or if he ſhould diſſent from ſome modes of practice, or forms of preſcription, liberties which he claims a right of exerciſing upon proper occaſions. Unknown therefore as he is at preſent, unacquainted with the *arts of book-making*, deſirous only of preparing the way for others, he ſubmits his plan to the conſideration of the public, hoping that ſome more able hand will offer to ſhare the trouble with him, and ſome correſpondents generouſly afford him the aſſiſtance he ſolicits.

The author will not preſume to urge the encouragement given to medical eſſays as a proof of the propriety of this undertaking: he is ſenſible of the difference that muſt unavoidably appear between this occaſional production, and the collected labours of many, eſpecially where the moſt celebrated geniuſes in phyſic contributed to one general deſign;* when men, whoſe names would do

* Vid. London Medical Eſſays.

honour

honour to any collection, united their efforts under the ſuperintendance of a ſelect few whoſe province it was to range into proper order the rich materials which were crowded upon them. What pity it is that ſo excellent a work ſhould be ſo long diſcontinued! Such publications are undoubtedly uſeful to the community, and although this preſent work will be deemed by ſome a feeble and ineffectual effort to eſtabliſh a medical correſpondence, yet in ſpite of all diſcouragements the author ventures to proceed. He attempts only to hold a ruſh-light, as it were, to thoſe great luminaries of ſcience who move in a higher ſphere; contented, if in his little orb, he can collect ſufficient ſupplies to keep his glimmering taper alive, and attract ſome degree of notice from the public, tho' he pretends to ſhine only with borrowed luſtre.

The author cannot help remarking that his work commences at an unfortunate period, when the unhappy diviſions amongſt many of the faculty, between the Fellows and Licentiates of the college, will doubtleſs engage too much the attention of the public: all theſe diſſentions are in the higheſt degree prejudicial to ſcience; they expoſe the profeſſors of both parties to much illiberal abuſe; and what is worſe, in proportion as the true ſons of *Æſculapius* are degraded in the eyes of the world, that numerous and ſpurious race, known by the denomination of Quacks, will increaſe and gain ground, will more and more infeſt the whole king-

dom, to the ſcandal of the profeſſion, and the great injury of the community. It is againſt theſe ignorant pretenders that our weapons ſhould be drawn, and not againſt ourſelves about mere forms,* when the common enemy introaches ſo inſolently upon our eſſential rights. But let us decline entering any deeper into this diſagreeable ſubject, it being the fixed reſolution of the author of theſe ſheets to obſerve the ſtricteſt nutrality in all controverſies whatever, and leave the paſſions of mankind to ſubſide of themſelves.

It is now high time to come to the matter in hand, and to explain the method in which it is propoſed to conduct this work. The title of it in ſome meaſure points out the deſign. It is intended as a Repoſitory of Caſes, Obſervations, and Criticiſms, comprehending every branch in Phyſic. If the remark of a very eminent genius be true, that he who knows the moſt facts, and has the greateſt preſence of mind, is indiſputedly the beſt phyſician, then of courſe facts will deſerve the preference: and indeed, whoever rightly conſiders the infinite diverſity in phyſical caſes, oftentimes inexplicable from any theory laid down, will be convinced how much depends upon a careful obſervance and inveſtigation of ſymptoms as they ariſe, and how much ſucceſs is obtained in conſequence of a ſagacity improved by practice, which immediately decides our conduct in ſudden emer-

* To Dr. ——, *Et tu, Fili!*

gencies,

geticies, and unuſual appearances. In the firſt place therefore a true relation of caſes will be acceptable; from theſe ſuch reaſonings may be afterwards deduced as to explain, upon juſt principles, from the knowledge of the human ſtructure, the cauſes, and at the ſame time teach us the means of curing diſeaſes.

Moreover, in reſpect to phyſical caſes, we have the ſame advantage as in all other facts; the account of them is obvious, is eaſily drawn up; whatever is moſt uſeful in the world is generally attainable by every capacity. We have no more to do than to obſerve the ſtricteſt regard to truth, and to relate what really appears: if we attach ourſelves to any particular ſyſtem, hypotheſis, or opinion, it is almoſt impoſſible to avoid partiality, and endeavouring to make facts bend to theory: this would render our evidence ſuſpected, of no validity or uſe, and our credit would of courſe be intirely overthrown. But when in conſequence of diligent attention in practice, we faithfully relate every ſymptom of a diſeaſe as it appears to us, then each caſe becomes a uſeful leſſon both to ourſelves and to others: Such is the ſuperiority in point of real uſe which facts obtain over theory: the firſt afford us the beſt materials for the foundation of knowledge, the other may furniſh ornaments for the ſuperſtructure, tho' care muſt be taken that it does not miſlead us from the true deſign. The hiſtory of caſes is philoſophy teaching by examples,

the

the ſtudy of theory, unleſs founded on facts, is at beſt but a ſplendid oſtentation of learning, whereby our imaginations may indeed be agreeably amuſed, but at the ſame time our experience little improved, or our judgment corrected.

To facts, obſervations may properly ſucceed: theſe are of various kinds; many, and thoſe the moſt uſeful perhaps, are furniſhed by facts themſelves pointing out the cauſes of ſuch and ſuch ſymptoms, enabling us to reaſon by analogy concerning their effects in other caſes; explaining the propriety or impropriety of the means uſed, the efficacy or inefficacy of medicines, proving by the event what is proper to be done in ſimilar exigencies, and eſtabliſhing from the whole ſuch a theory as may aſſiſt us in forming a right judgment how to act upon moſt occaſions. Remarks made from theſe principles are both curious and edifying; and from the ſame ſource our obſervations may be extended to every thing that relates to the profeſſion in general; for inſtance, to the examination of phyſical books, to medicines and the different formulæ of them, to the various phænomena in nature, the conſtitution of the air in different places and the prevailing diſeaſes, and indeed may be ſo diverſified as to furniſh ample inſtruction and amuſement even to the moſt learned and experienced practitioners: to be confined to any one part or branch of the profeſſion would by no means anſwer the deſign of this work, which admits

mits of boundleſs variety. We may obſerve, that notwithſtanding all our improvements, inventions, and corrections, numberleſs abſurdities ſtill prevail which ought to be eradicated; likewiſe new modes of practice from the fluctuation of faſhion often ſucceed to others for a time exploded; freſh diſcoveries too remain to be made; and amongſt the great number of human minds exerciſed in this profeſſion, ſome efforts of genius may appear, an account of all which properly collected, will form both a uſeful and entertaining hiſtory.

From this extenſive field of obſervation, it is propoſed to enter into the regions of criticiſm: of this both antient and modern medical books are the proper ſubjects; and that theſe will frequently afford ſufficient matter for enquiry, is obvious enough to any perſon who conſiders how much our education, our ſentiments, and our practice are influenced by what we read. If therefore, upon peruſing any author, to whoſe works a general eſtabliſhed reputation hath given a higher ſanction, ſome paſſages appear controvertible, or if any latent excellencies ſtrike us, either of theſe effects will be ſufficient motives for us to examine them with more accuracy, and to confute or illuſtrate in ſuch a manner as beſt to ſerve the end of inſtruction; but more eſpecially will that criticiſm be uſeful which derives from what is read ſome practical inferences which can be adapted and applied to immediate and neceſſary purpoſes,

confirming us in the proſecution of right meaſures, or reſtraining us from errors. Without ſuch application as this, our criticiſms will be of no more uſe than the many volumes of learned lumber which crowd our libraries, ſerving only to divert our attention, flatter our vanity, and waſte our time in pedantic and fruitleſs reſearches.

But beſides thoſe general and critical remarks which may occaſionally occur, it is propoſed to give in each number of this Miſcellany, an impartial review of new medical productions: this part of the work will be executed with all imaginable caution and tenderneſs; for where a conſcious ſenſe of our own imperfection prevails, lenity to others is moſt becoming; neither indeed does it appear by what legal right or authority any one man, or any particular ſet of men, can preſume to conſtitute themſelves ſupreme judges, and to erect a tribunal, before which authors like delinquents are brought, and their works examined without reference to a proper jury; even oftentimes approved or condemned by a deciſion of judgment as erroneous as that of other men in general, perhaps influenced in ſome reſpects by national partiality, or particular connections and prejudices, failings inſeparable from human nature. In this Miſcellany, therefore, that ſpecies of criticiſm ſhall have the preference which conſiſts in ſelecting what is uſeful or agreeable in an author, leaving the invidious taſk of finding out faults to others;

others; reſerving at the ſame time a privilege of examining with freedom his opinions, in order to do juſtice to the public. Nor is this mentioned with the leaſt intent of depreciating the labours of thoſe critics who have ſo long and ſo uſefully informed the world, but deſigned merely as a declaration of neutrality, conformable to the original ſcheme of this work.

But the moſt difficult part of this introduction ſtill remains to be executed and that is, to make an apology for perſiſting in this undertaking, eſpecially as the *London* Medical Eſſays are now publiſhed again. The truth is, the greateſt part of the firſt number of this Miſcellany was ready for the preſs before the third volume of the *London* Medical Eſſays was advertiſed; and although the author intended his performance as a ſubſtitute (however unequal) to that elaborate and excellent work, yet upon ſecond reflection it will appear preſumptuous in him to conſider it in that light, on account of the manifeſt inferiority of his attempt in compariſon to the united labours of that learned body, ſo ably diſplayed in thoſe eſſays. Therefore other reaſons muſt be given for this publication; amongſt which the principal is, the opportunity afforded hereby of more frequent communication of caſes and obſervations, ſome of which would probably loſe their effect as examples, if delayed and kept ſecret from year to year.

It is true indeed that in a *monthly** publication, the ſame accuracy, learning, and ability, cannot be expected as in a work which appears *annually*, or *triennially* only, wherein the materials being carefully ſelected and well digeſted, and compiled too by men of great eminence in the profeſſion, muſt conſequently appear with all poſſible advantages to the public. What then can reaſonably be expected from this preſent attempt? Far be it from the author to aim at concealing his weakneſs, or to impoſe on the world by falſe pretenſions: he does not, he cannot preſume to arrive at *excellence*; but he yet flatters himſelf that he may contribute to *uſe*. There are different degrees of merit, the leaſt of which, if he can attain, his endeavours will be ſufficiently rewarded. Beſides it is to be obſerved, that thoſe caſes which are uncommon, curious, and well drawn up (as the expreſſion is) ſeem chiefly calculated for the learned and not for general inſtruction; becauſe they do not ſo immediately relate to common practice, nor are they properly adapted to inferior capacities. Therefore by opening a door to more frequent and familiar correſpondence, and by publiſhing plain and inſtructive caſes, with practical obſervations and remarks for the uſe of the juniors in the profeſſion, the author hopes to

* Every third month the author deſigns to publiſh, if his time and his materials will allow; if not *occaſionally* only, as circumſtances may happen.

accompliſh

accompliſh his deſign by the kind aſſiſtance which he may receive from various hands; for this Miſcellany will afford an ample ſcope for the exerciſe of every mind. Whatever is moſt conducive to the welfare of ſociety and to the promoting of ſcience; whatever principles of practice are founded upon truth, reaſon, and experience, ought to be inculcated as often and as forcibly as poſſible: thoſe caſes and obſervations threfore that confirm us in theſe principles will be highly uſeful, as adding the teſtimony of theſe times to the wiſdom of former*. To a plan thus extenſive all are invited to contribute; gentlemen who have ſerved abroad in the late wars, practitioners reſiding in the different provinces of this kingdom, may from the variety of materials which their employments muſt undoubtedly have furniſhed them with in their reſpective ſituations, mutually oblige the public and themſelves, by communicating their obſervations. All that the author would wiſh is to be a faithful compiler, and to afford the world that ſatisfaction from the labours of others, which he deſpairs of giving by his own.

Before he concludes, the author thinks proper to offer his opinion concerning the utility of admitting foreign performances into this collection; for although he is ſenſible that genius and ſcience

* And beſides many valuable pieces may here be publiſhed with advantage, which of themſelves are not ſufficient to form a pamphlet.

cannot

cannot properly be confined to any one country, yet to ſuch a ſtate of pefection is the medical art arrived in *England*, as to require very little aſſiſtance or improvement from other nations. Whoever is converſant in the hiſtory of the progreſs of phyſic in this iſland, from the immortal *Harvey* to the preſent time, will find this obſervation verified, both in reſpect to the many important diſcoveries made by our countrymen, and likewiſe from many excellent writings here publiſhed, by which means both the theory and practice of phyſic and ſurgery have received the higheſt advantages. And again, it muſt be remarked, that great caution is requiſite to prevent too implicit a belief being haſtily given to the extravagant aſſertions in favour of the virtues of ſome plants and medicines recommended from abroad, by which we have already been impoſed upon. Such men as *De Haen* or *Storck*, however eminent they may be, and whatever influence they may obtain over the minds of the people in arbitrary countries, are to be regarded here, only in proportion as experience may confirm the truth and validity of their doctrines.*

There-

* In reſpect to the *Cicuta* and *Uva Urſi*, our experience fairly tried, produces no abſolute proofs of their efficacy; many alterations will indeed happen in chronical and inveterate diſeaſes which cannot with certainty be attributed to the medicines made uſe of, but may ariſe from conſtitutional changes. As to ſpeculative points argued in ſome foreign publi-

Therefore it will be proper to reſtrain ſomewhat of that fondneſs and credulity which induce men to admit too much; though at the ſame time we would not be actuated by prejudices equally blameable, or refuſe our aſſent to thoſe opinions and obſervations which reaſon and practice prove true, from whatever country or perſons they may be derived.

Laſtly, the author begs leave to obſerve, that as all human productions, eſpecially in their infancy, muſt be imperfect, therefore more lenity and indulgence from the candid public is requeſted, till the deficiencies of this work, both in variety and in matter, can be ſupplied by the auxiliary contributions which gentlemen of ſkill and experience in the profeſſion may be pleaſed to ſend. It is the expectation of receiving more valuable materials than what he hath at preſent collected, which prompts the author to adopt this mode of publication in ſeparate numbers, and at diſtant intervals of time. For by this means the work will be rendered more correct, ſo that the productions of thoſe who kindly lend aſſiſtance to it, may appear in a manner conſiſtent with the credit and reputation due to their names and characters. Therefore if this firſt eſſay meets with a favourable re-

publications, we confeſs ourſelves not more edified by the diſputes about irritability, than by the late contention here at home concerning the diſcovery of the *Lymphatics*.

ception,

ception, the author intends to give four numbers in the ſpace of the year, to complete a volume for 1768, and he begs leave to aſſure the public, that no pains will be ſpared on his part to make this work correſpond with its title, as *exhibiting an impartial View of the preſent State of Medical and Chirurgical Practice and Literature in* England.

☞ Gentlemen who chooſe to communicate caſes and obſervations in any branch of the medical art (to be inſerted in this Miſcellany) are deſired to direct their letters to the author of the M. M. at Mr. *Wm. Nicoll*'s, bookſeller, in St. *Paul*'s Church-yard, *London*.

BRITISH
22 AP 87
MUSEUM

ERRATA.

Page vi, for indiſputedly, *read* indiſputably.
Page 19, 30, 34, for proſtrate, *read* proſtate.
Page 37, for ſuſtible, *read* ſuſceptible.

THE

THE

# Medical Miſcellany.

## Medical *and* Chirurgical Caſes.

### *Obſervations on extracting the* Placenta.

IT ſometimes happens that the *Placenta* adheres ſo ſtrongly to the uterus as to occaſion the utmoſt difficulty in extracting it; inſomuch that the ordinary methods recommended for this purpoſe will not ſucceed; at the ſame time the prevailing prejudices of the women will not ſuffer practitioners to leave the Placenta for a time, and wait for the aſſiſtance of nature in this important buſineſs; but inſtead of this they are compelled to exert exceſſive violence, and bring away the Placenta at all events, to avoid thoſe cruel and unjuſt imputations which would otherwiſe injure their characters. Now in order to ſhew the extreme danger of too much precipitancy in theſe caſes, it is proper to bring the beſt authority we can; for which purpoſe a quotation from the celebrated

*Ruyſch*, relative to this ſubject, may prove a uſeful memoir, and more acceptable on this occaſion, becauſe the works of that author are not in many hands. It is preſumed unneceſſary however to give an exact and literal tranſlation of the whole chapter, but only to ſelect ſuch parts as contain the ſubſtance of his arguments concerning the point in queſtion. "Give me leave, (ſaith this "great * anatomiſt) to reſtrain that too buſy haſte "and anxiety in extracting the Placenta, which "often prove fatal in their conſequences; for this "being conſidered as an extraneous ſubſtance, "belonging to the fœtus, and not to the mother, "hath led practitioners to conclude, that it is "indiſpenſably neceſſary to extract it immediately after delivering the child. But it happens, "that from the convex ſurface of the Placenta, "fitted to the concave part of the uterus, the adheſion is frequently ſo ſtrong as to render both "one ſubſtance; in which caſe it becomes doubtful how to act, whether it is moſt eligible to "leave the Placenta for ſome little time in the "uterus, or to uſe extreme violence to bring it "away; that opinion carries great weight which "perſuades us to uſe cool deliberation in this circumſtance, to avoid deſtroying, by too much "haſte and temerity, a life which a prudent delay "might probably ſave. I am ſenſible that ſome "famous authors have advanced an opinion, that "if the Placenta is left in the uterus the woman

* *Ruyſch*, Adverſar. Anatom. Dec. 11. Obſerv. 10.

"will

" will be indangered; and I know very well mid-
" wives exert all their ſkill and force to extract it,
" in order to ſatisfy the friends of the patient:
" but I have too much reaſon to pity the miſe-
" rable women, who are frequently injured by ſuch
" haſty treatment; for immediately upon this
" the abdomen becomes hard and ſwells, a conti-
" nual fever attends, and death often follows.
" *Parey*, *Portal*, *Mauriceau*, and others, have giv-
" en us inſtructions in general how to extract the
" Placenta, but they have not been ſufficiently
" explicit in this particular and unuſual exigence.
" Caſes have occurred to me in which it was
" morally impoſſible, without imminent danger of
" death, to ſeparate the Placenta immediately
" from the uterus: in one circumſtance a ſtrong
" ſpaſmodic contraction of the uterus ſucceeds
" the birth of the child, forming a ſtricture ſo
" high up as to be almoſt out of the reach of the
" arm, and ſo extremely cloſe as ſcarce to admit
" a finger, at the ſame time the Placenta is con-
" fined beyond this ſtricture, and adheres very
" ſtrongly to the uterus: How then is it poſſible
" to extract this large maſs without uſing dange-
" rous violence? And this violence, to my know-
" ledge, hath occaſioned the ſudden death of ſome
" women, while the over buſy midwife, as if glo-
" rying in her performance, ſhews to the atten-
" dants the Placenta entire and uninjured by her
" hands. It happens likewiſe in ſome caſes, that
" tho' the *os uteri* is ſufficiently open, yet the ad-
" heſion of the Placenta is as ſtrong as if it had

" become one ſubſtance with the uterus; now if " in conſequence of coughing and ſtraining, or " after repeated trials by introducing the finger in " the direction of the funis, and endeavouring to " perforate or ſeparate the Placenta with caution, " we fail in our purpoſe, it appears to me moſt " adviſeable to deſiſt from any farther attempts " at preſent, and to leave it behind till nature of " herſelf (as frequently happens) brings it away. " but it will be ſaid in objection to this, that the " woman is not delivered while the Placenta re- " mains behind: I allow this; but of two evils " ought we not to chuſe the leaſt? And is it not " more prudent to leave the Placenta in ſuch caſes " till nature ſeparates it, or till a more favour- " able opportunity occurs, rather than deſtroy " the patient by haſty violence? Better certainly " that the woman ſhould live with the Placenta " remaining, than die in conſequence of forcibly " extracting it. The Placenta is part of the fœ- " tus, and not of the mother, and nature, always " intent upon her own preſervation, will, by in- " credible efforts and expedients, free herſelf from " all extraneous bodies that are hurtful; and " therefore ſhe will at length diſcharge the Pla- " centa, even when it hath been detained twenty " or twenty-five days in the uterus after delivery " of the child. Believe me, I ſpeak from truth " and experience, that out of ſixteen caſes in " which the Placenta was left behind, nature " freed herſelf in fifteen of them: thus, though " the Placenta ſhould be left (a circumſtance

" however that happens but ſeldom) the conſe-
" quences would not be ſo bad as commonly
" imagined: but ſtill the cry is, how can the wo-
" man be ſafe if the Placenta is left behind! I
" confeſs it is a deſirable thing to have it brought
" away, provided that can be done without put-
" ting life to the hazard; but ſuppoſing it re-
" mains, what will be the conſequence? Why the
" uterus by perpetually contracting itſelf, endea-
" vours to regain its priſtine ſize and figure, and
" conſequently, by preſſing the Placenta, will mold
" it into a hard round maſs, and will finally ex-
" pel it in that ſhape.

" Some again are willing to perſuade Practi-
" tioners, that if the Placenta is not extracted, it
" ſoon becomes putrid, and will occaſion inflam-
" mation, gangrene, and death: but the caſe is
" not ſo; for this is not a part of the uterus, but
" of the fœtus as obſerved before: and I am con-
" vinced from numberleſs examples, that if the
" Placenta ſhould be ſuffered to remain, and its
" veſſels not ſoon ſeparated from the interior ſur-
" face of the uterus, yet it never is diſſolved into
" pus or ichor, or any putrid liquor: their fears
" therefore are groundleſs who ſuppoſe that a putrid
" exhalation may ariſe, and ſo far infect the maſs
" of blood as to occaſion hectic fevers, inflamma-
" tions, and other terrible miſchiefs. For if this was
" the conſequence, what would become of thoſe
" unhappy women who labour under the moſt ex-
" cruciating diſeaſe for ſome years; I mean a
" cancer of the uterus; now theſe patients ſurvive

" a long

" a long time, notwithſtanding an intolerable fœ-
" tor, which ſcarce permits any one to approach
" them, much leſs to examine minutely into the
" ſtate of the diſeaſe. All thoſe vulgar objec-
" tions therefore relative to the Placenta being
" left behind, are of no weight; and yet vulgar
" prejudice ſits as a judge and influences our con-
" duct: for what muſt a prudent midwife do,
" who uſes all proper methods and endeavours,
" and yet finds it impoſſible to extract the Pla-
" centa, without exerting ſuch violence as muſt
" unavoidably prove fatal to the mother? * Will
" not the women who are preſent at the labour,
" admoniſh, urge, cenſure, and threaten? Will
" not they accuſe the midwife of ignorance, and
" ſend for another whom they ſuppoſe more ſkil-
" ful? This will certainly be the caſe; and there-
" fore the midwife irritated and alarmed by theſe
" means, becomes quite deſperate, redoubles her
" efforts, and raſhly tearing away the Placenta,
" does fatal injury to the uterus. I deſerve cre-
" dit from phyſicians in this point, becauſe, dur-
" ing the ſpace of four years, I had extenſive and
" conſtant practice in midwifery in this great
" city; † and moreover, for forty years I exer-
" ciſed, by appointment of the magiſtrates, the
" office of ſuperintending the college of mid-
" wifery, to teach or examine all practitioners, to

* *Hippocrates* and others of the antients were averſe to the uſing of force in extracting the Placenta: quotations might be produced in great number upon this point, but the author is contented with mentioning barely the fact.

† *Amſterdam.*

" give

" give anſwers when conſulted in difficult caſes,
" and to open the bodies of thoſe who died in
" child-birth, in order that I might account for
" the cauſes of their death.

" Anatomiſts have not perhaps ſo accurately
" examined the ſtructure of the uterus as to diſ-
" cover that there are peculiar muſcular fibres
" belonging to it, ſo contrived as to diſengage and
" ſeparate by their action the convex ſurface of
" the Placenta from the concave part of the ute-
" rus. The Placenta generally adheres to the
" fundus uteri, in which part theſe orbicular fi-
" bres, very ſtrong in themſelves, and exerting
" their power according to their direction, con-
" tract the body of the uterus into rugæ; from
" which diſpoſition it follows, that thoſe parts of
" the Placenta which cannot be adapted to this
" altered ſurface, are of courſe looſened and ſhook
" off. A preparation of the uterus thus con-
" tracted, I have preſerved to demonſtrate the ex-
" iſtence of this orbicular muſcle to every one:
" it is obſervable that the other muſcular fibres
" of the uterus, are promiſcuouſly interwoven in
" different directions, that they may expel the fæ-
" tus by a general contraction, but this peculiar
" muſcle, from its ſituation and action, is intend-
" ed to force away the Placenta only." *

To account for this adheſion of the Placenta, *Ruyſch* ſays, " that the degree of force with which
" it does adhere, is according to the inſertion of

* The exiſtence of this *Muſculus Orbicularis* is doubted by ſome, but the matter is not worth a controverſy.

" the

" the funis, the nearer the centre the greater the
" adhesion, and *vice versa*, the nearer the circum-
" ference the easier it is extracted. The gene-
" ral rule is, to loosen first the edges of the Pla-
" centa; but notwithstanding this precaution,
" the adhesion is frequently so strong as to render
" the separation by force impracticable or dan-
" gerous, and therefore we ought to wait a few
" hours, till the efforts of nature bring it away.
" I do not mean by these observations to make
" midwives negligent or irresolute; far from it;
" the Placenta undoubtedly ought to be extracted
" if we can do it with safety; every motive com-
" pels us to it; the women will never be satisfied
" till it is brought away: their prejudices in this
" point are insurmountable, and they will not al-
" low the just rules of art to take place for the
" welfare of the patient; therefore I was ap-
" pointed by the magistrates to stem this torrent
" by some superior authority, as well as I
" could."

So far it has been thought proper to quote this author; and indeed the whole chapter is well worth our perusal, exclusive of some trifling, to which this great man was now and then addicted.

Supported by so considerable an authority, and likewise convinced of the truth of these observations by many practical instances, I think it may be necessary to consider this important matter with more attention: In the first place therefore I will offer some conjectures as to the cause of this extraordinary

traordinary adheſion of the Placenta. *Ruyſch** we ſee attributes it to the inſertion of the funis exactly in the centre of the Placenta. But practice does not confirm this opinion; it appeared to me from ſome unfortunate caſes, that the cauſe proceeded from a diſtempered habit during geſtation, particularly in women advanced beyond the middle period of life, and in ſuch whoſe employment was laborious, and whoſe diet was coarſe and improper for their ſituation†: In all theſe a putrid diſpoſition of the fluids was obſerved to be moſt prevalent, and this very frequently in conſequence of an abſorption of the contained impure humours by the bibulous pores of the uterus: and it is no improbable ſuppoſition from the very nature of the connexion between the Placenta and the uterus, that by means of the ſame power of abſorption, the veſſels of the former may be more and more firmly united and interwoven with the ſubſtance of the latter. Surgeons have obſerved ſimilar effects in wounds and abſceſſes from abſorption, inſomuch that the lint itſelf, upon which the firſt dreſſing is ſpread, hath been found not only ſticking very cloſe to the ſurface of a wound, but

* In vol. 1, Obſerv. 97, he gives his opinion more expreſſly in this matter.

† In theſe the growth of the fœtus is comparatively ſlow, the ſecretion of the humours in the uterus imperfect, occaſioning various difficulties in delivery. "Nimirum ob pa-
"buli ubertatem vel inopiam corporis robur vel imbecillita-
"tem; vitæque (ſecundum ſex res medicis non naturales
"dictas) rectum regimen, vel inordinatum, fœtus etiam ſe-
"rius aut citius ad maturitatem ſive partum perducun-
"tur." *Harv. Exercit. de Partu.*

likewiſe drawn in amongſt the fleſhy fibres themſelves: if therefore this abſorbing power in the veſſels prevails ſo ſtrongly in the extremities of the body, and operates upon foreign matter applied to wounds, how much greater muſt the effect of it be in the warm cavity of the uterus, eſpecially upon a ſubſtance by nature intimately joined to it? By conſidering the matter in this light, it will evidently appear that the cauſe of the preternatural adheſion of the Placenta is not merely accidental or local, but that it ariſes from a more dangerous ſource, from a diſeaſed conſtitution, and therefore the conſequences are more to dreaded; and the operator who prudently endeavours to correct this bad diſpoſition of the body, and avoids uſing exceſſive violence in extracting the Placenta, deſerves praiſe and not cenſure.*

Several caſes might be produced by the writer of this paper to confirm his opinion in reſpect to the difficulty in queſtion:—On *April* 1, 1767, he was ſent for to a woman near her time, who laboured under the attack of a fever; the ſymptoms appeared extremely ſimilar to thoſe which ariſe frequently from deep and latent abſceſſes in the body, and from abſorbed matter in wounds, par-

*Is this abſorption of humours, or of matter, the cauſe or the effect of a putrid habit of body? I ſhould ſuppoſe the latter; and if ſo, external force or application will be ineffectual; in wounds where the diſcharge is ill conditioned, Mr. *Kirkland*, an ingenious ſurgeon, recommends ſponge to be applied in order to abſorb the matter, but if that matter is generated in conſequence of a bad diſpoſition of the body, we muſt firſt endeavour to correct the habit, and the effect will ceaſe of courſe.

ticularly

ticularly after amputations; namely ſhiverings, exceſſive heat and thirſt, a very dry tongue, intermitting and wandering pains ſometimes in the ſide, more frequently in the head, affecting the membranes of the brain, and a diarrhea.—By proper methods uſed, ſhe got better, but labour came on ſooner than we wiſhed, and proved very tedious and lingering; indeed the operator expected this in conſequence of the fever, which he ſuppoſed to proceed from abſorption in the uterus: after conſtant pains for four and twenty hours, and the child being long detained in the birth, the woman was at length delivered, and the operator immediately tracing the funis, endeavoured to bring away the Placenta; but by no means, after repeated trials, could he ſucceed. It was propoſed to leave it to nature, and to preſcribe proper medicines; but theſe expedients the women abſolutely condemned, and ſent for another practitioner, who made prodigious efforts, hoping to accompliſh what the former had given up. He brought away ſome fibrous ſubſtance, but it was impoſſible to diſtinguiſh what it was; hereupon it was agreed to deſiſt from any more violence, and wait the event under a proper regimen aſſiſted by medicines: after an interval of five days, and much anxiety and diſcontent, the Placenta came away, tho' not altogether compact and entire. Mean time the abdomen ſwelled, owing no doubt to the violence uſed to the uterus, ſymptoms of internal mortification came on, and the next day after the Placenta was diſcharg'd the woman died.

In another caſe an eminent practitioner was call'd in by a midwife, who had inverted the uterus by endeavouring to extract the Placenta, altho' ſhe haſtily reduced it again; after due examination he declared it impoſſible to diſtinguiſh one part from another, and declined uſing any more force. —The patient was evidently of a bad habit of body, and ſeveral ſymptoms of a putrid fever from abſorption appeared; proper medicines were ordered, but notwithſtanding all poſſible care ſhe loſt her life.

The writer of this was called in to another caſe, where he found the woman (a perſon about forty years of age, big with her ſecond child, and who had ſuffered ſeverely during her firſt pregnancy) afflicted with lingering pains and feveriſh ſymptoms; there was reaſon to apprehend premature labour, which accordingly came on, and proved extremely tedious: after delivering the child, the Placenta was found very ſtrongly adhering, which the operator not being able to extract, he left it till the next day, and even then, as no remarkable pains came on, he omitted meddling with it; on the third day it was brought away very eaſily; but the putrid diſpoſition of habit, which was the cauſe of the patient's malady, ſtill continuing, and the fever increaſing, ſhe died the 21ſt day after delivery. In reſpect to the lochial diſcharge, no material deficiency was obſerved, and the abdomen never ſwelled.

Our apprehenſions of the future difficulties which may probably ariſe from a putrid diſpoſition

of

of body in the patient from abſorption, and from adheſion of the Placenta, are confirmed when we find the labour pains lingering and ineffectual; becauſe it is reaſonable to infer, that the expulſive power of the uterus is weakened and obſtructed by the Placenta in ſuch caſes; and we frequently are embarraſſed by the child being retained almoſt upon the point of delivery, for a long time, from the cauſe here mentioned. In reſpect to thoſe difficulties which are occaſioned by wrong preſentations of the child, by rigidity and tightneſs of the external parts, they are more eaſily ſurmounted; becauſe the uterus in itſelf remains in a proper ſtate, capable of exerting ſufficient force, and in turning caſes, will ſuſtain amazing violence without much injury, and ſoon regain its priſtine tone and figure. But where the uterus has been affected, the humours abſorbed, and the circulating fluids hereby vitiated, we have reaſon to fear an unfavourable event.* For ſuppoſe, in extracting the Placenta, mere force prevails, how is the cauſe itſelf remedied? What point do we gain in reſpect to the conſtitutional infirmity? We may indeed ſatisfy ſome ignorant attendants by the ſight of

* "Pariter obſtetricibus expertis non ignotum, mulieres "aliquando conceptum integrum, cum ambientibus mem-"branis illæſis, excludere; atque hujuſmodi partus videtur "maxime naturalis, in quo fœtus, (tanquam fructus matu-"rus qui ab arbore totus ſolvitur, ſeminibus ante deſtinatum "a natura tempus minime effluentibus) una cum ſecundis "elabitur. Ubi enim ſecus fit, & Placenta poſt natum "fœtum utero adhereſcit, ea ſæpe difficulter ſolvitur, & pra-"va ſymptomata inducit.—*Harv. Exercit. de Partu.*

the

the Placenta, but as to the eſſential ſafety of the woman we gain but little, unleſs the antecedent cauſe is removed, as well as the apparent difficulty.

During the time of geſtation, in ſuſpected conſtitutions, it is incumbent upon us to keep a watchful eye over our patients, to regulate their diet and exerciſe, and to uſe immediate means on the appearance of any diſeaſe. As to the common inconveniences attending the enlargement of the uterus, they are eaſily remedied: nor have we ſo much reaſon to be alarmed by inflammatory as by putrid ſymptoms, by acute as by chronical diſorders; theſe latter prognoſticate fevers from abſorption, and difficult labours; and we muſt endeavour, if poſſible, to prevent the conſequences, and remove the root of the evil. When labour comes on, after ſuch circumſtances, and we find an unuſual ſtrong adheſion of the Placenta not to be ſeparated immediately, unleſs by exceſſive violence, let us wait awhile, to procure ſuch a truce from pain as to enable nature to aſſiſt herſelf, and try what can be done by venæſection, if the pulſe will bear it, by proper diluents, volatile acids, *

* The notion of ſome particular medicines, ſuch as the *Pulv. e Myrrh comp.* and others having a *forcing* power (as it is called) in the uterus, is erroneous: But on account of their cordial and antiſeptic qualities in putrid diſeaſes, and in the retention of the Placenta from thoſe cauſes, they may be preſcribed with advantage; I ſpeak not of their effects as fœtids. Thus emænagogues act as cordials ſucceſsfully, becauſe the ſuppreſſion of the menſes and other uterine affections often ariſe from putridity, for the menſes are abſorbed in a putrid habit, from the ſame cauſes as the Placenta adheres.

glyſters,

glyſters, the bark and opiates, in order to correct the bad ſtate of the body, which if we are able to accompliſh, the obſtructed veſſels will become pervious, the circulating fluids will be reſtored to their original purity, the fever will ſubſide, and of courſe the uterus will ſoon diſengage itſelf from the Placenta. But on the other hand, if we place our chief dependance upon force, and injure the uterus thereby, we ſhall then weaken thoſe very powers which are deſigned by nature to aſſiſt us upon ſuch emergencies. Theſe ſentiments are the reſult of practice, and are freely offered to the conſideration of the public, either to be confirmed by the joint experience of others, or confuted, if ſufficient arguments and proofs can be advanced againſt them, the principal deſign of the author being to contribute all in his power to the removal of thoſe unhappy prejudices, which too often influence our practice, and hurry us into fatal miſtakes; and ſince the writing of this memoir the author hath the ſatisfaction of finding his ſentiments conformable to the opinion of Dr. *Hunter* and Dr. *Harvie*.*

## *Remarkable Caſes of Inflammation of the Bladder and Suppreſſion of Urine, with the Method of Cure.*

"*Aug.* 28. MR. —— having imprudently drank too freely in the evening, after "taking a doſe of ſalts, complained in the night

* Vid. Practical Directions, &c. by Dr. *Harvie*.

"of

" of a difficulty in making water, attended with
" frequent motions to ſtool, which upon his
" loſing blood twice that night, by purging, and
" the uſe of the warm bath, was much abated the
" next morning.

" *Aug.* 29. The efforts to make water were ve-
" ry frequent, but the quantity diſcharged each
" time was inconſiderable: this evening he was ap-
" prehenſive of a ſuppreſſion, for which reaſon he
" loſt more blood, and had a glyſter thrown up,
" and took ſome opening medicines.

" *Aug.* 30. Was much better, and ſo far re-
" lieved as to go abroad, but ſtill the frequency of
" making water in ſmall quantities ſhewed that
" the diſorder had not entirely left him, and ac-
" cordingly,

" *Aug.* 31. About five o'clock in the morning
" a total ſuppreſſion came on, and notwithſtand-
" ing repeated bleedings, purgatives, glyſters, and
" warm bathings, &c. it continued till eleven
" o'clock, when the water was drawn off by the
" catheter, to the quantity of ℔ iiſs.; he loſt more
" blood about two hours afterwards, and the
" ſame operation was repeated at night, glyſters
" were thrown up, moderate doſes of opiates ad-
" miniſtered, and the warm bathing frequently
" uſed; notwithſtanding all which he paſſed a
" very reſtleſs night, with frequent irritations and
" ſpaſms.

" *Sept.* 1. About five o'clock this morning a
" total ſuppreſſion returned, and altho' the cathe-
" ter was with much difficulty paſſed into the
" bladder

" bladder three times, yet no water came away. " Recourſe was then had to opiates, gr. ſs. of " opium, every half hour, and towards night " gr. iv. every four hours; plaiſters of opium " were applied to the abdomen, perinæum, and " the region of the kidneys: the pains and ſpaſms " were violent and frequent during the whole " night, and about five in the morning, on

" *Sept.* 2. The ſpaſms were particularly ſevere, " and little or no urine was diſcharged: between " eight and nine o'clock a terrible rigor came on, " attended with a low pulſe, which continued to " ſink and intermit; at the ſame time the muſ- " cles of the face were convulſed, likewiſe a cold- " neſs of the limbs, faintneſs, cold ſweats, and la- " borious reſpiration, indicated the moſt extreme " danger. In this deſperate ſtate ſome warm port " wine was given him, and in the ſpace of an " hour he began to grow warmer, and by conti- " nuing the uſe of wine, a cordial and wine whey, " the pulſe began to riſe, the fatal ſymptoms went " off, and about one o'clock, after a ſpaſmodic " contraction, the bladder ſuddenly relaxed of it- " ſelf, and the urine unexpectedly came away in " conſiderable quantities. The patient afterwards " made water as uſual, without any difficulty, ex- " cept a ſoreneſs for two or three days, and being " in the flower of his age, ſoon recovered perfect " health."

This is the abſtract account of an extraordinary and dangerous caſe of an inflammation in the bladder, which it is proper to illuſtrate by the following re-

marks and obſervations, fairly deduced from the facts that happened:

Firſt, it was evident from experience in this caſe, that the introduction of the catheter was not attended with any eſſential advantage, but on the contrary might have been productive of much miſchief, by lacerating the parts in conſequence of the force exerted in puſhing the inſtrument into the bladder. This expedient was ſuggeſted from an erroneous ſuppoſition, that water retained in the bladder might be the cauſe of the diſeaſe in queſtion: but the impropriety of it was proved by the effects that enſued; for notwithſtanding three ſevere trials were made on *Sept.* 1, yet no water came away, but a ſtream of blood only iſſued from the wounded paſſage, leaving it doubtful in ſome meaſure whether the inſtrument had really penetrated into the cavity of the bladder or not. Now it ſeemed diſtinctly clear, from a due conſideration of the ſtate of the parts, that there was in fact little or no water then in the bladder; becauſe that organ was ſo much contracted in conſequence of the inflammation of it's internal coat, and the inceſſant ſpaſms occaſioned thereby, that no urine could be ſuffered to remain in it; for every drop which flowed from the ureters immediately excited freſh irritation in the bladder, with perpetual and painful efforts to diſcharge the contents: In this inflamed condition it was impoſſible for the urine to paſs, much leſs to ſtay in its uſual receptacle, but the greater part was by the violent preſſure of the contracted bladder forced back through other

emunctories

emunctories, eſpecially through the pores of the ſkin, as was evident by the profuſe ſweats which the patient continually laboured under: and the ſame ſtrong reſiſtance was undoubtedly made to the entrance of the inſtrument, as occaſioning ſtill greater irritation in ſo ſenſible an organ in the ſtate abovementioned; beſides all the adjacent parts were affected by the ſame inflammatory ſymptoms, namely the rectum, the proſtrate gland, and the whole canal of the urethra, with its continuous membrane, conſequently the uſe of the inſtrument in ſuch circumſtances was improper.* What advantage could be obtained if there was no water to draw off? If the bladder could not bear a drop of urine without being affected by freſh ſpaſms, how could the catheter be endured? And for the ſame reaſons the puncture in perineo, recommended by ſome authors in total ſuppreſſions of urine, would have been not only unſucceſsful but fatal. The danger of the diſeaſe we ſee did not conſiſt in mere retention of urine, but in violent inflammation, for altho' the catheter was ſucceſsfully introduced on *Aug.* 31. and lb iiſs of water drawn off, yet the cauſe remaining, the effects ſpeedily returned, and therefore the remedy was temporary only, and not effectual.

During the paroxyſms of pain, the rectum, by reaſon of its contiguity to the bladder, was likewiſe affected, hence thoſe frequent and violent ſtrainings and motions to ſtool, which were not in the

* An ingenuous acknowledgment of our miſtakes, is as uſeful as a relation of our ſucceſsful practice.

leaſt relieved by any diſcharge. Theſe were very unfavourable ſymptoms. What is obſerved by one of our ableſt phyſicians and writers now living upon another occaſion may be applied to this, "Inter mali morbi ſigna ducenda ſunt omnia ex- "creta ſi non ſecundum rationem eveniunt; ſi a "vitio nil demunt; multo pejus eſt ſi morbo "addunt."* And indeed theſe irritations and ſpaſms of all the parts near the bladder, evidently proved the inflammatory ſtate of that organ threatning a fatal event.

From the foregoing obſervations it appears indiſpenſably neceſſary to make a juſt and accurate diſtinction in reſpect to the cauſes of a ſuppreſſion of urine, that a proper method of cure may be aſcertained. *Heiſter* gives ſome uſeful cautions on this occaſion.§ In the caſe now recited experience proves, that when a ſuppreſſion of urine happens in conſequence of an inflammation of the bladder, either in its neck or internal membrane, from whatever cauſe, then the uſe of the catheter is not only highly improper, but extremely dangerous.

On the other hand, when urine is retained in the bladder from a weakneſs in that organ, either from a paralyſis of its muſcles, as frequently happens in old conſtitutions, or in women after delivery from the preſſure made by the child, in thoſe circumſtances it is neceſſary to introduce the inſtrument, that the bladder freed from its load may have liberty to contract again, and recover its tonic

* *Glaſs* de Febribus Comment. 4

§ *Heiſter*'s Surgery, Part 11, Chapt. 137.

powers.

powers. In one caſe, the diſeaſe conſiſts in the bladder not being able to contain any urine at all, on account of ſucceſſive ſpaſms; in the other, becauſe it is become incapable of irritation, and diſtended with too great a quantity. This eſſential difference the concomitant ſymptoms plainly diſtinguiſh. In the firſt caſe, frequent ſpaſms, with hardneſs of the pulſe, pain in the bowels, and other ſigns according to the age, ſtrength and habit of the patient, and the efficient cauſe of the diſeaſe, denote great inflammation and violent contraction of the bladder. In the latter, an uneaſy ſenſation of fullneſs without violent pain, and a perceptible ſwelling in the region of the pubis, ſhew that the bladder is too much relaxed and diſtended. In inflammation therefore the cure conſiſts in bleeding, purging, warm bathing, and opiates, but the uſe of the catheter is forbid. In relaxation oppoſite meaſures are to be purſued, the catheter is to be introduced, and afterwards, by the aſſiſtance of the bark and other corroborants, the diſeaſed organ will be rendered capable of performing its uſual offices.

From this digreſſion I now return to the caſe deſcribed, and having condemned in this inſtance the uſe of the catheter, ſhall relate more particularly the method of cure which the phyſical gentlemen (to whoſe care and ſkill the patient owed his life) ſo ſucceſsfully purſued.

The propriety of copious bleeding in all inflammatory diſeaſes, particularly of membranous parts, being ſufficiently obvious, that evacuation

was

was frequently repeated; the violence of pain and the fullneſs of the pulſe indicated the neceſſity of it. When an organ of ſuch importance as the bladder is affected, bleeding *etiam ad deliquium* is requiſite, becauſe during a ſyncope, the contracted membranes will often relax of themſelves. This patient loſt blood ten times in the ſpace of three days, and in conſiderable quantities: at the ſame time plentiful dilution with warm liquors, emollient medicines and emulſions was preſcribed, with the intention of rendering the obſtructed veſſels of the diſeaſed organ pervious, and likewiſe of abating the acrimonious quality of the urine, that it might be leſs capable of exciting irritation. Gentle anodynes too were adminiſtered, warm bathings were uſed, and the region of the pubis anointed with an anodyne liniment: aperitive and emollient glyſters, with tinct. thebaic. added, were thrown up at proper intervals, in order to keep the rectum empty, and take off all preſſure from the bladder. But notwithſtanding theſe prudent meaſures, the ſpaſms ſtill becoming more frequent and ſevere, with agonizing and inceſſant pain, not to be deſcribed, recourſe was more boldly had to the grand ſpecific, opium. And here it muſt be obſerved, that in all caſes wherein it is abſolutely neceſſary to abate pain by means of opium, *we ought to purſue that intention till the effect is produced.*† This rule hath not been ſufficiently explained

† Amongſt the many obligations which the medical world owes to *Sydenham*, the recommendation of anodynes, in various caſes, is none of the leaſt. Treating of the Bilious Cholic

plained and inſiſted upon by the medical writers: and ſome phyſicians, in conſequence of a practice too timid in this reſpect, by not giving proper quantities of this noble drug, have failed in their purpoſe in caſes of great emergency. That it was abſolutely neceſſary to proſecute the intention here recommended in the inſtance now before us, appears evident from the nature of the diſeaſe; becauſe during the violence of pain and of ſpaſms, no water could properly paſs through the bladder: what little urine was voided came away in the intervals of thoſe ſpaſms: a circumſtance which pointed out the remedy. The obſervations made by the great Dr. *Mead*, in regard to the diſcharging of gravel, are founded upon the ſame principles of reaſoning urged here; for whether inflammation ariſes from ſtones or gravel in the bladder, or from ſome other cauſe, the effects of irritation are ſimilar. After recommending anodynes, "a "ſtone (ſaith he) is never forced out while the "patient is in great torture; though when the "pain ceaſes, it ſometimes comes away unex-"pectedly, and almoſt of its own accord, with "the urine. And the reaſon of this is, that pain "conſtringes the fibres of the parts, which reſume "their natural ſtate, and perform their functions

Cholic, he ſays, "I could never take off violent pains with-"out a larger doſe than is uſual, and that repeated too; "for that which is ſufficient to conquer another diſeaſe, will "be wholly inſufficient in this caſe, the violence of the diſ-"eaſe ſubduing the force of the medicine; and it is indeed "ſafe to repeat anodynes while ſuch a pain as this continues "violent."

"properly

" properly, when the troubleſome ſenſation is " over."*

The practice of giving large quantities of opium in ſpaſmodic complaints is well known and recommended, for inſtance in the locked jaw,§ nor need we apprehend any ill effects from it. We are ſometimes indeed led to ſuppoſe, that there are particular idioſyncraſies in ſome conſtitutions, which do not ſo well admit the uſe of opium; but the urgent circumſtances of extreme pain and violent ſpaſms, entirely ſuperſede all other conſiderations. For it matters not much even if the membranes of the brain ſhould be affected, becauſe that diſorder ſoon wears off, and is amply compenſated by procuring eaſe and ſafety to the patient. The great point therefore which we wiſhed to obtain in the preſent caſe, was a remiſſion of thoſe violent ſtrainings, which in the irritable ſtate of the bladder, aggravated the diſeaſe, and by long continuing, threatened a mortification. To obviate this danger, *four grains* of opium were given at a doſe, till in the ſpace of twenty-four hours the patient had taken *twenty grains* of that medicine, and to aſſiſt in the ſame intention, a plaiſter of opium was applied all round the abdomen. Theſe methods, though their effects were not immediately viſible, yet they doubtleſs were conducive to the cure. For at length, after ſevere rigors, a favourable criſis hap-

* *Mead*'s Works, quarto edit. p. 529.

§ Vid. *London* Medical Obſervations, vol. 1, article 1ſt, by Dr. *Silveſter*.

pened

pened, the bladder was ſuddenly relaxed, and the urine came freely away: but yet we had at firſt ſome reaſon to doubt whether that ſymptom was a ſalutary criſis of the diſeaſe, or a fatal prelude to a mortification. Much depended on the goodneſs of conſtitution, and nature (to whom all medicine is only an aid ſecondary and ſubordinate) having procured a reſpite from pain, fortunately prevailed and relieved herſelf in this dangerous extremity.

At the time when this criſis happened, the patient was in a ſtate of inſenſibility, owing partly to the effects of opium, and partly to the urinous ſalts, which being thrown back into the circulation by the violence of the diſeaſe, had made ſome impreſſion upon the membranes of the brain. But theſe effects gradually wore off; and though the ſpaſms and rigors in ſome degree remained, yet the intermiſſions became longer, and care was taken to prevent the return, by repeating, at proper intervals, and in leſs quantities, the doſes of opium. Thus by degrees the bladder being free from irritation, recovered its uſual tone, and performed its office without pain: the patient ſoon regained his ſtrength, and feels no ill conſequences from his diſorder.

Having by this remarkable inſtance proved the ſalutary effects of opium in inflammations of the bladder, it is neceſſary to make ſome obſervations upon a paſſage in *Hoffman*, which directly and abſolutely forbids the adminiſtration of ſo ſucceſsful a remedy. Speaking of inflammations, he ſays,

"Inſtar axiomatis practici hoc loco notari velim, "in inflammationibus nervoſarum & membrana-"cearum partium ut in phrenitide, pleuritide, "hepatitide, item in inflammatione ventriculi, "inteſtinorum & *veſicæ*, nil perniciosius eſſe, & "quod tam facile ad mortem perducere queat, "opiato remedio interno. Stuporem enim hiſce "partibus facile inducit & in minimis vaſculis "motum & progreſſum ſanguinis penitus ſiſtit, "ut ſphacelus ac mors inducatur. Quare cautiſ-"ſime cum ejuſmodi remediis, etiam exterius ap-"plicatis hiſce in morbis agendum eſſe moneo ac "inculco ſerio, compluribus lethiferis exemplis "hanc obſervationem confirmantibus.*

But the teſtimony even of ſo famous an author as *Hoffman*, however poſitively delivered, cannot invalidate facts, which on the contrary, are of themſelves ſufficient to confute his ſingle opinion; beſides his arguments in this point ſeem to be not founded on reaſon; for as to the operation of opium retarding the circulation of blood through the ſmall veſſels, it is an effect which we frequently wiſh to produce, particularly in inflammations, when the blood is urged with too much impetuoſity into the *minima vaſa*, by which means their canals become obſtructed, and in conſequence of a diſeaſe ſo formed, mortification often enſues. Therefore upon the very principles which *Hoffman* condemns, experience directs the uſe of opium. In inflammations of membranous parts, eſpecially

* *Hoffm.* tom. 2, ſect. 2, l. 9, p. 156.

of

of membranous receptacles, that conſtriction of the fibres which pain occaſions, and thoſe unnatural ſpaſms and irritations which continually torture the patient, are urgent proofs of the neceſſity of adminiſtering ſuch a medicine as ſhall quiet thoſe deſtructive ſymptoms: for they not only render the organs affected incapable of performing their offices, but likewiſe by ſtimulating, cauſe them to injure their own texture. And does not this extreme neceſſity entirely ſuperſede every minute conſideration? Shall we be deterred by fallacious reaſoning of its effects from uſing that medicine, whoſe virtues in theſe caſes, repeated experience hath proved? It muſt not be inferred from theſe ſtrictures that I think opium a ſpecific merely of itſelf; other means ought undoubtedly to be uſed, which every prudent phyſician knows how to preſcribe; but in ſpaſmodic affections of membranous parts, no other medicine will equally ſucceed. It is with reluctance, and even diffidence, that I preſume to paſs any cenſure upon ſo celebrated a name as *Hoffman*, but the greater the authority of a writer is, ſo much the more dangerous are his errors, and conſequently the more pains ſhould be taken to confute him when we have facts and experience on our ſide.*

I might

* I obſerve that this opinion of *Hoffman* is quoted by Dr. *Brookes* in his *Practice of Phyſic*, and as that book is much in the hands of young practitioners, a refutation of ſuch erroneous doctrine appeared more neceſſary. And here, upon a review of thoſe *farrago's* in medicine, publiſhed by ſome authors, I cannot help remarking how much a new and correct ſyſtem of phyſic and ſurgery is wanted. The many late

I might here enlarge on the efficacy of opium in ſeveral other inflammatory diſeaſes, namely cholics, fevers, ſtrumous and venereal opthalmies, when given judiciouſly in proper quantities, and the effects of it calculated to take place at the time of the acceſs of pain or fever. But theſe caſes I reſerve for ſome future opportunity; one only I ſhall briefly relate.

On *Sept.* 11. A young gentleman, ſubject to ſpaſmodic colics, was taken ill with a fit of that diſorder. The pain was ſevere and conſtant, particularly on the right ſide of the abdomen, affecting the peritoneum; he vomited, though not frequently, and there was but little bile diſcharged. This day he was bled and took ſome common

improvements made by eminent ſurgeons in their profeſſion, as well as by phyſicians in the elegance and efficacy of preſcription, and the ſucceſsful treatment of diſeaſes, would render ſuch a work highly valuable. The taſk indeed is too arduous and extenſive for any one man ſingly to undertake, on account of the hurry of buſineſs, the uncertainty of health, and the ſhortneſs of human life; but by the united labours of a body of the moſt experienced phyſicians and ſurgeons, wherein each individual might exerciſe his peculiar talent in different departments, the whole might be compleated. An elegant but imperfect ſketch we have already in Dr. *Mead*'s *Monita & Præcepta Medica*. Perhaps in the Acta Medica of the college of phyſicians, which we hope will ſoon appear, ſomething of this nature may be attempted; and from the ſkill and abilities of many members of that learned body, much may be expected, whether they chooſe to exerciſe their genius in ſyſtematical writing, as moſt ſuitable to the dignity of the college, or in detached pieces, and the relation of particular caſes, according to the practice of other Societies.

opening

opening mixture, which operated once or twice, but the pain continued.

*Sept.* 12. The ingenious phyſician who was conſulted, thus preſcribed in the morning,

℞ Sal. cathart. amar. ʒii, ſolv. in aq. font. ℔i.

℞ Mercur. dulc. ſexies ſublim. gr. viii, mucilag. q. ſ. m. f. pil.—Deglutiatur pilula quamprimum, elapſa dein hora bibantur ſolutionis ʒiv, duæque poſtea ſingulis horis donec ſatis ducta fuerit alvus.

In the Evening,

℞ Opii puri gr. ii, camphor. gr. iii, balſ. peruv. q. ſ. m. f. pil. ii, quamprimum ſumendæ.

Injiciatur dein enema quod habeat ſal. cathart. amar. ʒii, aq. font. ℔iß.

℞ Gum. ammon. gr. vi, mercur. dulc. ſexies ſubl. gr. ii, opii puri gr. i, balſ. peruv q. ſ. m. f. pil. ii, ſecundis horis donec ceſſaverit dolor ſumendæ.

Of theſe the patient took four doſes in twelve hours, with advantage, but his head ſeeming to be a little affected, the uſe of them was for a while omitted.

But on *Sept.* 13, as the pain returned, the ſol- was the preſcription:

Repet. enema.

℞ Sp. minderer. ʒiv, aq. cinnam. ſimp. ʒiß. tinct. thebaic. gt. xxxv, ſyr. e mecon. ʒii, m. f. hauſt. quamprimum dandus & ſecundis horis repetendus donec ceſſaverit dolor.

℞ Sal. cathart. amar. Mann. opt. ſing ʒii, ſolv.

in

in aq. font. Ibi, cras mane dentur cochl. ii, bis in horis donec ducta fuerit alvus.

The patient took all the draughts in the ſpace of the night, and was much better, without any diſturbance from the opiate:—This practice, however bold it may appear to ſome, was rational, and ſo great was the ſucceſs, by giving large doſes of anodynes along with cathartics and glyſters, that the patient was in effect quite well the fourth day, whereas in former attacks he hath lain ill for a fortnight or three weeks.

In venereal caſes an inflammation of the bladder is a frequent ſymptom: for the internal membrane or coat of the urethra being continuous, the irritation from the virus, in the glands of that canal is communicated to the bladder. This irritation is more or leſs from various cauſes, owing to the conſtitution and regimen of the patient, and the degree of the diſeaſe. An imprudent uſe of purges, eſpecially draſtic ones, increaſes it: an enlarged proſtrate, either in conſequence of venereal or ſcrophulous acrimony, or former injudicious treatment,* will cauſe an aggravation of the ſymptoms. When ſpaſms enſue (neceſſary evacuations being premiſed) opium is a ſpecific.

* How cautious ought youth to be (if youth would think) of the management and the effects of claps; for by repeated infection the canal of the urethra is contracted, the proſtrate gland enlarged and made ſchirrous, the ſeminal veſſels obſtructed, and the generative faculty in all its organs impaired and even diſabled: the conſequences of which are ſeverely felt by an imperfect and diſtempered progeny.

On

On *Feb.* 27, *R. B.* after taking ſome rough purges for a gonorrhea, applied for relief, complaining of frequent ſtrainings to make water, with a burning heat, which increaſed the ſtimulus: the venereal diſcharge was almoſt ſtopped. I enjoined reſt in a recumbent poſture, and directed as follows:

Mittantur ſanguinis ℥xvi.

℞ Decoct. commun. pro clyſter. ℥xii,
Ol. Olivar. ℥iii.
Opii puri ſolut. ʒi, m. f. enema ſtatim poſt venæſectionem injiciend.

℞ Opii puri gr. i, 4ta quaq. hora ſumend. donec ceſſaverint veſicæ irritationes—bibat etiam emulſ. commun ℥iv. poſt ſing. pil. narcotic.

*Feb.* 28. The patient much better, but neglecting to take his medicines at proper times, and refuſing confinement,

On *March* 2. The ſpaſms returned.

Mittantur ſanguinis ℥xvi.

℞ Amygd. dulc. excortic. ʒi.
Gum. arabic. ʒß.
Sacch. alb. ʒvi, ſimul optime contundantur cum aq. flor. aurant. in paſtam molliorem cujus ſumat. Q. N. M. major. in aq. tepid. ℥iv, ſolut. 4ta quaq. hora.

This was ordered for conveniency, and is a very uſeful formula in private practice, ſerving as a portable orgead, or making an extemporaneous emulſion.

*Mar.* 3. The irritations to make water ſtill continuing

tinuing, and even increaſing, the patient ſubmitted to confinement, and kept his bed,

Mittr. ſang. ℥xii. h. nona matutin.

Repet. enema.

Repet. pil. narcot. (quæ gr. i, opii habeat) cum emulſ. ſumend. 2da quaq. hora urgent. dolore.

Mittr. ſang. ℥xii. h. nona veſpertin.

Repet. enema ſi non ducta fuerit alvus.

*Mar.* 4. The patient much relieved, and in proportion as the painful ſymptoms abated, leſs quantities of the opiate were adminiſtered, and the rectum all along kept open by gentle aperitives and glyſters.

*Mar.* 5. Continues better.

Mittr. ſang. ℥x.

During the ſpace of theſe three laſt days, plentiful dilution was ordered, to the quantity of one pint of warm liquid every hour, or every two hours, according as his ſtomach could bear it: and this was done for the following reaſons, which have been hinted at in the former caſe; the urine when it is ſecreted ſlowly through the kidneys, becomes more loaded with ſalts, whoſe acrimony will naturally excite a greater degree of irritation in the bladder: this we find to be the caſe even in health, from a ſmall quantity of urine thus ſaturated (after ſleep for inſtance) occaſioning an equal ſtimulus with a larger quantity more diluted. This acrimony is abated by copious drinking of ſmall lubricating liquors, which quicken the ſecretion, a circumſtance highly neceſſary,

eſpecially

eſpecially in an inflammatory and irritable ſtate of the bladder, when the urine ought to be rendered as mild as poſſible. Moreover, the obſtructed veſſels will ſooner become pervious, and the tenſion of the membranes relaxed, in conſequence of warm aqueous fluids, internally and externally applied. This reaſoning holds good in ſlighter caſes of dyſury in gonorrheas of the urethra only, notwithſtanding I obſerve the ingenious and experienced Mr. *Fordyce* hath given a caution againſt plentiful dilution.* In reſpect to nitrous medicines I agree with him, but as to the quantity of ſimple lubricating liquors proper to be drank, I differ; for it is not the quantity of urine ſecreted, but the acrid quality of it which excites frequent and painful ſtimulation. And again, in inflammations of the internal coat or membrane of the urethra, where the pain in making urine is conſiderable, or eſpecially if there is any tendency to ſpaſms, I uſe opium more freely than common practice hath hitherto directed. But to return to our patient.

On *Mar.* 6. He was ſo well recovered (tho' much reduced) as to go abroad, and the bladder performed its office without pain. However there occurred a circumſtance which ought to be mentioned. It was expected after ſuch large evacuations, and in conſequence of ſuch plentiful dilution, that the fluids in every veſſel of the body would have been entirely changed and become purified, as in

* *Fordyce*'s Review of the Venereal Diſeaſe, and its Remedies.

an infant ſtate; but as ſoon as the patient recovered ſtrength, the running from the urethra appeared again, and was attended with ſuch acrimony as to occaſion a ſevere chordee. This is a manifeſt proof of the validity of what Mr. *Fordyce* advances in oppoſition to *Boerhave*'s doctrine, that the antiphlogiſtic method, tho' proſecuted to an extreme, will not eradicate the venereal virus, when the proſtrate gland is affected: and therefore on account of the activity and obſtinacy in this ſpecies of poiſon, I was obliged to have recourſe to mercurial inunction, together with pills compoſed of *arg. viv. & pulv. rhei*, by which means the patient was perfectly cured.

In reſpect to thoſe obſtructions in the urinary paſſage, which require the uſe of bougies, I ſhall only here enter one caution: in caſes where any ſymptoms of inflammation remain, an indiſcriminate application of them occaſions many inconveniences. But a more particular account of theſe celebrated remedies will be the ſubject of ſome future paper.

## *Obſervations on the Conſtitution of the Air, and the prevailing Diſeaſes.*

THE effects of the atmoſphere upon human bodies, have in different ages and nations, much engaged the attention and enquiry of medical writers. In our country two great men have particularly diſtinguiſhed themſelves by obſerving the

the various changes and conſtitution of the air, and deſcribing the epidemical diſeaſes thence produced; I mean *Sydenham* in the laſt century, and *Huxham* in this. To their accurate and judicious remarks concerning the uſe and importance of inveſtigating the properties of the air in different ſeaſons, it would be preſumptuous in me to attempt to add any thing: what I have to offer under this article at preſent will be very imperfect, and intended rather as the means of aſking information from others, than of communicating any material intelligence myſelf: for it cannot be expected that any one practitioner, reſiding in one place, ſhould be able to give an account of the general conſtitution of the air, becauſe his obſervations muſt of courſe be limited to the particular ſphere in which he acts, and therefore an extenſive correſpondence from various parts is requiſite to ſupply this deficiency.

Amongſt thoſe who are converſant in the hiſtory of diſeaſes, it hath been matter of ſpeculation to account for the reaſons why an epidemical conſtitution of air is leſs frequent than formerly in *England*. The plague for inſtance, to the dreadful ravages of which this nation was often ſubject, hath not viſited us ſince the years 1665 and 1666, notwithſtanding it has raged in ſome parts of *Europe* within this century, and as near to us as *France* in 1720; and altho' on account of that promiſcuous commerce carried on from hence in every part of the globe (in a manner extenſive beyond any example that the annals of the world

can produce) we might reaſonably be alarmed with the apprehenſions of having the plague introduced by various means from ſome infected place: yet this calamity hath not lately happened, and may not perhaps ever appear in *England* again.

But to what cauſes then do we owe our ſecurity? are we preſerved by the natural happy temperament of the atmoſphere in which we breathe? by the frequent changes and variations of it to which this climate is ſubject? or by the healthful ſtate of our own bodies, and ſome circumſtances in our manner of living?——Some have ſuppoſed that luxury, by introducing greater freedom and exceſs in the uſe of rich foods and fermented liquors, hath been inſtrumental in defending us againſt thoſe infectious particles in the air, which amongſt the poorer claſs of people fed upon low diet frequently produce putrid diſeaſes. How far this may be fact I cannot determine. If the whole region of the ſurrounding atmoſphere ſhould be contaminated with peſtilential vapours or *miaſmata*, it may be preſumed that the rich as well as the poor muſt be liable to infection, yet perhaps not in ſo great a degree, becauſe that firmneſs and tenacity in the blood, which is derived from the uſe of generous diet, would better enable bodies ſo nouriſhed to reſiſt the diſeaſe. But whatever reaſons may be given for the abſence of the plague, this obſervation may be made, that the laborious part of our people owe the means of defence againſt many diſeaſes to their exerciſe and employment: in large manufacturing towns for inſtance,

where

where the inhabitants are engaged in conſtant tho' not violent labour, we find fewer diſeaſes in general than might be ſuppoſed from the number of people. But in countries where the people are indolent and poor, the noxious qualities which happen to be in the air, more ſurely bring on epidemical diſorders: and perhaps this may be one reaſon why the plague rages ſo much in the *Turkiſh* dominions, where the ſubjects are kept in the moſt abject ſlavery, and having no property ſecure to them, become indifferent and averſe to labour and employment.

The induſtry of our huſbandmen and mechanics, not only keeps their bodies in proper exerciſe, but likewiſe enables them to live better in reſpect of food than the common people in other nations do, or than they formerly did in this; a circumſtance which probably adds to their defence againſt the effects of a bad diſpoſition in the air. Nor muſt we omit obſerving, that the employment of their minds contributes alſo to the preſervation of their health, as rendering them leſs ſuſtible of thoſe impreſſions upon the imagination, which ſometimes produce an hypochondraical habit, and expoſe the body to putrid and malignant diſeaſes. From theſe as well as other cauſes we may in part account for that general good ſtate of health of late years prevalent in *England*, for tho' the air perhaps, at times, has been in ſome meaſure infected, yet our bodies have been better able to reſiſt its influence.

But notwithſtanding that happy exemption from epidemical

epidemical diſeaſes (at leaſt mortal ones) which we have long enjoyed; there have been at different times appearances of a peſtilential quality in the atmoſphere, affecting the brute creation, tho' the human ſpecies hath eſcaped. Inſtances of this are too recent in our memory to render any account of them here neceſſary. Apprehenſions are generally formed of epidemical diſorders amongſt cattle proving forerunners of the ſame amongſt mankind: Dr. *Huxham* relates ſome examples of this nature happening in 1728 and 1733, and at the ſame time gives reaſons why cattle are firſt infected.* But theſe apprehenſions are moſtly groundleſs, though the nature and properties of that peculiar conſtitution of air, which hath a ſeparate influence, ſometimes over men, and ſometimes over beaſts, cannot eaſily be accounted for.

Although by following the example of ſo great a man as *Sydenham*, we ſhould attain ſufficient accuracy in our obſervations on the ſtate of the air

* "In obſidione *Trojana*, primo canes, mox muli, poſt homines peſte correpti fuerunt. Haud ſemel obſervavi morbum inter pecora erupiſſe primo, dein eum ipſum paulo poſt tempore in homines *epidemice* ſæviiſſe; quod & anno 1728 & 1733 fuit manifeſtiſſimum: in quibus nempe tuſſis graviſſima omnes pene equos corripuit uno alterove menſe citius quam homines.

"Quum nimirum hoc animantium genus maxime ſub dio verſetur, morboſo aeris *diatheſi* ſit valde obnoxium neceſſe eſt, non tantum aerem inquinatum inſpirando, eumque per cutis poros imhibendo forſitan; ſed dum aquas hauriunt & carpunt gramen, condenſatam quaſi ſub ſpecie roris atmoſphæram morbidis particulis contaminatam, exugunt." *Huxham. Obſerv. de Aere & Morb. Epid. p.* 3.

and

and epidemical diſeaſes, even to diſtinguiſh the genius and idiopathic character of them; yet we ſhould likewiſe find their effects varying in different habits, ſo that the ſame general diſeaſe, does not in every body produce the ſame ſymptoms: hence ariſes the neceſſity, notwithſtanding our univerſal knowledge, of attending minutely to particular circumſtances in each conſtitution, from which the curative indications muſt be taken, and accordingly different means muſt be uſed, and different medicines adminiſtered. The general properties of the air, no man, though he underſtands them, can anywiſe alter, therefore his attention muſt be employed, and his ſkill exerted in obſerving and obviating the various effects which thoſe properties may produce amongſt individuals: in each of whom he muſt examine how the diſeaſe operates in his conſtitution, by the ſame rules and methods as common practice enjoins, independant of any conſiderations relative to the influence of the atmoſphere. We may be aſſiſted it is true, in our practice, by knowing the ſtate of the air, but not abſolutely directed; nor muſt the application of remedies be indiſcriminate under a notion of their ſpecific virtues in epidemic diſtempers. It is the neceſſity of attending to theſe particular circnmſtances in all diſeaſes, that employs ſuch numbers of practitioners in the profeſſion of phyſic.

Again, in reſpect to the ſtate of the weather, it is recommended to keep a meteorological journal, and Dr. *Huxham* hath beſtowed many pages upon

upon ſuch a regiſter; but it may be aſked *cui bono?* I kept an account of this kind in 1767, but after comparing it very attentively with the effects in diſeaſes that then happened, I could not diſcover the leaſt uſe in it, and therefore it was diſcontinued. The mind ſoon tires in purſuing any object from which no uſeful and practical inference can be drawn; and beſides we find, that our patients will call for our aſſiſtance at irregular times, and upon occaſions that cannot have any relation at all to the exact point of the compaſs from which the wind blows, or to the quantity of rain that happens to fall in a day: every man, in ſhort, carries the ſeeds of ſome diſeaſes within him, which burſt forth unexpectedly from a thouſand accidental circumſtances in his conſtitution, independant of the weather.

I ſhall now proceed to ſay ſomething of the ſtate of the air and diſeaſes in 1767, which ſubject will be diſcuſſed in few words, becauſe I can only pretend to relate what occurred in the circle of my own practice. The ſtate of air produced no effects worth mentioning, and indeed ſince the late *Influenza*, we have had no remarkable epidemic conſtitution.* In reſpect to diſeaſes, I obſerved towards the latter part of the year, that putrid fevers, attended with an ulcerated ſore throat and petechiæ, were very frequent; theſe diſeaſes pre-

* In *November* and *December* there was a general diſtemper amongſt Horſes, attended with a cough, and a diſcharge from the Noſe, and great weakneſs, which killed conſiderable numbers.

vailed

vailed in *September* and *October*, and chiefly amongſt young people and children: In ſome the progreſs was extremely rapid; they to whom it proved fatal, were ſeized with violent ſickneſs, an intenſe and continual pain in the back, faintings and delirium, and died on the third or fourth day, ſo that little time was allowed for the application of remedies. The bodies of two or three of theſe people became immediately putrid, inſomuch that a very ſpeedy interment was neceſſary to prevent any ill conſequences from infection: before death a large and livid ſwelling of the eyelids appeared, which quickly turned black, and the ſkin and cellular membrane, in various parts of the body, were ſo corrupted, as frequently to ſtrip off. This was the diſeaſe in its moſt extreme and putrid degree, little ſhort of the plague.

In reſpect to the treatment of this fever, and ulcerated ſore throat, the method recommended by thoſe excellent phyſicians *Fothergill*, *Huxham*, and *Wall*, was chiefly obſerved. I found the giving of *Ipecac.* or *Tart. Emet.* in ſmall doſes, often repeated, very ſerviceable eſpecially in caſes attended with ſickneſs and looſeneſs; and indeed this mode of practice may be ſucceſsfully uſed in all fevers wherein either bilious acrimony, or putrid colluvies oppreſs the ſtomach: for nature herſelf, in thoſe circumſtances, points out the neceſſity of irritation, that the offenſive matter may be more ſpeedily diſcharged.——Vitriolic acids were plentifully adminiſtered, and had a good effect in correcting that putrid humour in the firſt paſſages,

which often occaſioned a diarrhea: particular care was taken to have a ſtream of freſh air conſtantly circulating in the rooms of the ſick, and where intenſe thirſt, and a very dry tongue required dilution, I allowed *Toaſt-water* cold; at the ſame time generous wine and cordials were preſcribed. In ſome, bliſters applied early, ſerved to abate the delirium, *pediluvia* were uſeful, and moderate doſes of anodyne medicines often neceſſary. When the proper time for giving the *Cort. Peruv.* appeared, I uſed glyſters to thoſe children who would not be prevailed upon to take ſufficient quantities by the mouth. In almoſt all the caſes which occurred, there was a deſquamation of the ſkin, and the Schneiderian membrane, through its whole extent, was affected: the reſpiration in many was laborious, and then bliſters were always ordered. It is needleſs to particulariſe any caſe, after giving this general deſcription, and as to the *formulæ* of medicines, they are eaſily adapted to the ſeveral circumſtances that may ariſe: however, I found the two following very uſeful in their reſpective intentions, on account of their pleaſant taſte, moſt of the children who refuſed other medicines taking theſe very readily:

℞ Aq. roſar. damaſc. ℥vii.
Syr. balſam. ℥i.
Sp. vitriol. fort. gt. x. m.

℞ Extr. cort. peruv.
Conſ. cynoſb. aa ʒiii
Syr. moror. q. ſ. m. exactiſſime ut fiat elect. molle.

I con-

I conclude this article with obſerving, that in the month of *December*, the meaſles appeared frequent, and though during the extreme cold weather their progreſs ſeemed rather checked, yet after the diſſolution of the froſt they returned again, but were unattended with any remarkable circumſtances.

## COMMENTARIES *on* New Medical Books.

THE author of the Medical Miſcellany, on this his firſt entrance into the regions of criticiſm, feels himſelf much embaraſſed by ſeveral reflections which ariſe in his mind, enfeebling his powers, and almoſt deterring him from the proſecution of his attempt. He is ſenſible that the taſk of a commentator is not only arduous and difficult, but invidious alſo, inſomuch that nothing could have induced him to undertake it, except the neceſſity which he lies under of giving an account of the preſent ſtate of medical literature, in order to complete the plan of this work.

Whoever attempts to give a fair repreſentation of any literary performance, ought to be poſſeſſed of ſome ſhare of the ſpirit, learning, and ability of the author of it: now this does not commonly fall to the lot of a critic, for which reaſon his opinion muſt frequently be erroneous, and his abſtract inſufficient to convey a true idea of the ſentiments,

or to do juſtice to the merit of a writer. In proportion as genius, learning, ſtudy, time and other requiſites for good writing have been beſtowed upon a work, ſo of courſe it will be more difficult to exhibit a proper review of it: Moreover, it may be obſerved, that although the circumſtance of being anonymous, is in many reſpects excuſable in an author, yet if he ſhould preſume to take upon him the part of a critic, and to condemn the works of any man whoſe name is fairly expoſed to the public, whilſt he conceals his own, he would be deſervedly reproached for taking an unjuſt advantage: and the ſenſible part of mankind will always ſuſpect and call in queſtion the teſtimony of thoſe, who meanly ſheltered by their obſcurity, dare not reveal their own names, though they frequently take great liberties in cenſuring and ridiculing others. Again, when the production of a man eminent for his capacity, ſkill, and experience, is to be commented upon, it behoves us to touch the pen with a cautious—with a trembling hand; for the ideas of compariſon between the author and the critic, and their reſpective talents, will naturally ariſe, and make an impreſſion upon the readers to the diſadvantage of the latter. For theſe and various other reaſons the author of this Miſcellany, to avoid giving pain or offence, propoſes only to ſelect ſuch paſſages from any work which he reviews, as may have a uſeful tendency, chooſing to expreſs his diſapprobation by ſilence, rather than cenſure. If he ſhould happen to exerciſe ſeverity upon any occaſion, it will be when

an

an author betrays an illiberality of ſentiment, incompatible with the true ſpirit of literature, and which in the opinion of all impartial and diſpaſſionate men, will appear juſtly deſerving of rebuke.

*An Eſſay concerning the Cauſe of the Endemial Colic of* Devonſhire, *by* George Baker, *Fellow of the College of Phyſicians and of the Royal Society, and Phyſician to her Majeſty's Houſhold.*

IN this eſſay Dr. *Baker*, (who by his eminent merit hath obtained a place amongſt the firſt of his profeſſion) undertakes to explain the origin and cauſe of the Endemial Colic of *Devonſhire*. After ſome general remarks expoſing the inutility of inveſtigating remote and obſcure cauſes, and the neglect of thoſe which are obvious and evident, he obſerves, that the preſent age hath learned to attend more to nature, and to pay due regard to thoſe cauſes which lead us directly either to the cure of diſeaſes, or to the prevention of them. The earlieſt account (ſays he) of the *Devonſhire* Colic, which I have met with, is in Dr. *William Muſgrave's Diſſertatio de Arthritide Symptomatica*, publiſhed in the year 1703. In the fifth ſection of the tenth chapter *de Arthritide ex Colica*, is this paſſage: —* "Another ſpecies of colic, particularly in *Devonſhire*, is occaſioned by too much uſe "of rough and acid cyder: which is evident by "its affecting thoſe only who drink it, and in pro-"portion to the quantity they conſume; ſo that in "thoſe ſeaſons which abound with apples, this

* This is tranſlated from the Latin.

"diſeaſe

" diſeaſe becomes more general; but on the con-
" trary, when there is a ſcarcity of fruit it doth not
" ſo often occur." Dr. *Baker* expreſſes his ſurprize that the author juſt now quoted, ſhould omit taking notice of the peculiar and pathognomic ſymptoms terminating in palſy or epilepſy, which diſtinguiſh the *Devonſhire* Colic, eſpecially as he appears from another paſſage in his treatiſe (hiſt. 4, chap. 10,) to be well acquainted with them; but this omiſſion is accounted for, by ſuppoſing, that the produce of apples was but ſmall in his time, conſequently the diſeaſe not ſo frequent; nor had he the opportunity of ſeeing ſo many caſes, as there was not a county hoſpital then exiſting. Dr. *Huxham* is next quoted in his *Opuſculum de Morbo Colico Damniorum*, publiſhed in the year 1739; from whoſe deſcription of the diſeaſe Dr. *Baker* readily determines it to be ſimilar to that mentioned by *Francis Citois*, phyſician to the king of *France*, and to cardinal *Richlieu* in 1617; but he diſſents from Dr. *Huxham*'s opinion, who thinks it ariſes from a ſimilar cauſe, namely the two great uſe of acids.

" Dr. *Huxham* refers the cauſe of the *Devon-*
" *ſhire* Colic, principally to a very groſs, eſſen-
" tial, acid ſalt, or tartar, with which the ex-
" preſſed juice of apples, whilſt unfermented,
" abounds. By long and frequent drinking a
" liquor of this kind, ſuch a quantity of crude
" groſs tartar is thrown into the blood, that it
" thence becomes very acrid; and not only the
" blood, but from that impure ſource, all the
" humours

" humours thence ſecreted: ſo that inſtead of a " very ſoft lubricating mucus, ſeparated by the " glands diſcovered by Dr. *Havers*, we have as it " were a ſharp coagulated matter, whence ariſes a " great pain in the joints, and impotence of their " motion. Inſtead of an exceeding ſoft lymph " to moiſten the nerves, a corroſive ichor; and " hence epileptical attacks. Moreover, the blood " being ſaturate with ſuch a great quantity of " ſalts, they attract one the other ſtrongly, and " form greater moleculæ than can paſs through " the lymphatic arteries, ſcarce indeed through " the ſanguineous capillaries; hence various ob- " ſtructions, and great irritation on the nervous " extremities. At length, even the bile, that va- " riouſly uſeful balſam of the body, becomes cor- " rupted, and quite enervated by the ſuperabun- " dant apple acid, though in its natural ſtate it " was deſigned to correct acidity." This is the ſubſtance of Dr. *Huxham*'s doctrine. But Dr. *Baker* doubts the ſolidity of it, and obſerves, that there is not the leaſt analogy between the juice of apples and the poiſon of lead, and that this Colic of *Devonſhire* is preciſely the ſame diſeaſe, which is the ſpecific effect of all ſaturnine preparations. Here then we firſt perceive the deſign of Dr. *Baker*'s pamphlet, and the theory which he means to ſupport; and certain it is, that whether he is or is not miſtaken in his opinions, he hath beſtowed much pains and learning in the inveſtigation of his ſubject, proving himſelf equal to that character which he hath acquired, of being one of our beſt

medical

medical writers. After quoting one anonymous author, (ſuppoſed to be *M. Bouvart*) who ſeems, though imperfectly, to have entertained the ſame ſuſpicion with Dr. *Baker*, in reſpect to the adulteration of wine and cyder by litharge, our author proceeds to controvert Dr. *Huxham*'s opinion relative to the pernicious effects of acids, by obſerving, that no ſuch effects are known amongſt the eaſtern people, who drink large quantities of acid ſherbet; nor amongſt jockeys, who drink vinegar to reduce their weight; nor amongſt the poorer inhabitants of *Worceſter*, *Glouceſter*, and *Hereford*, who uſe a weak acid cyder as their common drink, nor is it ſhewn that *Rheniſh* and *Moſelle* wine have produced the colic of *Poitou*, in an unadulterated ſtate. As to the eſſential ſalts of a vinous liquor, it is not reaſonable to ſuppoſe, that they can raiſe ſuch tumults in the bowels, when it is vulgarly known, that this very eſſential ſalt, the cremor tartari is an effectual remedy for this ſame diſeaſe amongſt the miners of *Derbyſhire*. Dr. *Hillary* likewiſe greatly depended upon it for the cure of the dry belly-ach in the *Weſt-Indies*. *Zeller* ſays, that the inhabitants of the neighbourhood of *Tubingia*, had long drank wines as acid as vinegar, without any injury, till the revival of the adulteration with litharge. Add to theſe obſervations, that phyſicians who have reſided ſome time in the hotter countries teſtify, that there are no better remedies againſt ſpaſms, dyſenteries, and the other endemial diſeaſes, than the acid vegetables produced in thoſe climates: ſufficient reaſons therefore

fore appear for ſuſpecting that this colic in *Devonſhire* does not proceed from pure cyder, but from ſome fraudulent or accidental adulteration of it.

Previous to the manner of explaining this adulteration, Dr. *Baker* takes notice of the univerſality of this diſeaſe in *Devonſhire*, and adds, that it infeſts more particularly thoſe parts of the county where the greateſt quantity of cyder is conſumed: He then quotes the repreſentation drawn by *Citois* of the wretched victims of this diſeaſe (ſimilar to which are the appearances in gilders and painters, working with mercury and lead) this deſcription is ſufficiently characteriſtic, "They appear in the "villages as if maſked, or like moving ſtatues, "pale, ſqualid, and lean, with their heads incur-"vated and hanging down, incapable of raiſing "them up without art or aſſiſtance: their feet "uſeleſs as if not belonging to them; the muſ-"cles of their legs performing an aukward gait, "ſuch as would excite ridicule, if not reſtrained "by pity; and their voice hoarſe, yet ſounding." As an evidence of the frequency of this diſeaſe, a liſt is given of patients admitted into the *Exeter* hoſpital, for this infirmity, whoſe number upon an average, amounts to 70 *per annum*. In the † *Bath* hoſpital in one year, 80 patients labouring under this diſeaſe were admitted, chiefly from *Devonſhire*.

An extract from ſome letters of the very ingenious Dr. *Wall* is next introduced, in which that

† The uſe of theſe waters, both internally and externally, is recommended as a ſpecific in this diſeaſe.—I may add, that in all paralytic diſorders, occaſioned by working with mercury or lead, the *Bath* water does great ſervice.

gentleman obſerves, that the counties of *Hereford*, *Glouceſter*, and *Worceſter*, are in general free from the colic of *Poitou*, or any other endemial diſeaſe: that there is no lead uſed in any part of the apparatus for grinding or preſſing the apples: he excepts one inſtance, wherein a farmer filled a leaden ciſtern with new cyder, (till hogſheads could be obtained) the conſequence of which was, that all who drank it were affected as the lead-workers uſually are.

In order therefore to come to the point, and to demonſtrate the cauſe of the *Devonſhire* Colic, Dr. *Baker* takes notice, that the cyder-makers of that county uſe lead in cramping their ciſterns, and filling up the interſtices between the ſtones; that it is a common practice to line their cyder-preſſes with lead, or to make a border of lead round them, and in ſome places to nail ſheet lead over any cracks or joints in the preſſes; to convey the juice of the apples in leaden pipes; and that ſome farmers, in managing their weak cyder, made early in the year from unripe fruit, put leaden weights into the caſks to prevent the liquor growing ſour:—By ſome, or any of theſe means, it unavoidably happens, that the apple juice muſt come in contact with this poiſonous mineral; and to aſcertain more clearly the mode of union which takes place between wine or cyder and lead, the doctor proceeds to theſe obſervations: "The expreſſed "juice of the grape or of the apple, has a conſi- "derable quantity of acid united with the ſaccha- "rine matter. This juice when ſubjected to fer-

"mentation,

" mentation, has its acid, during the progreſs of " that fermentation, gradually aſſimilated, and " converted into an alcohol or inflammable ſpirit. " But if the original juice or muſt be crude and " acid, without having much ſaccharine matter " in it, the native acid is with difficulty aſſimilat- " ed: or when it arrives at the proper period of " aſſimilation, it does not remain there ſtationary, " but haſtens on to the acetous fermentation. " When lead is added to ſuch wines, their acidity " is covered, a ſweetneſs is communicated to them, " and their acetous fermentation is checked. The " richer wines are leſs liable to adulterations of " this kind, than the poorer wines of northern " climates (ſuch as *Rheniſh* and *Moſelle*) and our " *Engliſh* cyder. It is here to be obſerved, that " the vegetable acid, either in its native ſtate of " muſt, or its fermented ſtate of vinegar, or its " intermediate ſtate of cyder, very readily re- " ceives an impregnation from lead, whether it " be applied in its metalic or calcined ſtate. We " are therefore to conſider lead, when united with " wines, as in the condition of *Saccharum Sa-* " *turni*."

Dr. *Baker* then gives an account of ſeveral experiments made upon the *Devonſhire* cyder, to prove the preſence of lead in that liquor, and afterwards makes ſome obſervations on the pernicious effects of ſaturnine medicines, notwithſtanding they have been ſo much uſed and applauded by ſome practitioners. But the limits of this paper will not allow us to follow our ingenious author

through all his arguments and quotations; and thererefore we ſhall conclude this article with the following remarks:

Notwithſtanding the proofs produced by the experiments here related, of lead being actually found in the *Devonſhire* cyder, yet the quantity of that mineral, from the doctor's own account, appears to ſome altogether inſignificant, and incapable of exciting any ſuch violent ſymptoms as are the diagnoſtic ſigns of the *Devonſhire* Colic. But this objection, formidable as it ſeems to be, againſt our author's theory, may in ſome meaſure be obviated by thoroughly conſidering the pernicious properties in general of poiſonous minerals; the immediate effects of which, however prevented, and their operation retarded by much dilution, yet we may preſume, that by conſtant uſe they muſt greatly injure the human body, particularly thoſe tender and irritable parts, the internal ſurfaces of the inteſtines, from whence ſo many fatal diſorders ariſe. Again, it is to be obſerved in praiſe of Dr. *Baker*, that the theory which he advances not only points out the cauſe of a diſeaſe, but likewiſe a remedy for it: for if the uſe of lead is ſo pernicious, is it not eaſy to make cyder without any of this mineral in the apparatus? an expedient which it behoves the cyder-makers to put in practice. But on the other hand, if the cauſe of the *Devonſhire* Colic conſiſts in the eſſential properties of the cyder, the common liquor of the inhabitants, as Dr. *Huxham* and others ſeem to think, how is this baneful property to be corrected?

What

What ſubſtitute can be found to ſupply the wants of the people, if cyder cannot ſafely be uſed? They are therefore only informed of a miſchief which they cannot prevent, and ſtill muſt remain the defenceleſs victims of a diſeaſe inſeparable from the uſe of the product of their own country, in one of the moſt neceſſary articles of life.

*Some Obſervations on Dr.* Baker's *Eſſay on the Endemial Colic of* Devonſhire. *By* Francis Geach, *Surgeon, at* Plymouth, and *F.R.S. Pr.* 1*s. Printed for* R. Baldwin, London.

MR. *Geach* in theſe obſervations appears a ſtrong advocate for Dr. *Huxham*'s opinion, concerning the cauſe of the *Devonſhire* Colic, in oppoſition to Dr. *Baker*'s theory; thinking it more probable that this diſeaſe ſhould be owing to a predominant acid in the cyder, than to the effects of lead. He imagines, that from the drinking large quantities of acid liquors, before they have acquired a proper fineneſs and ſtrength by age, much elaſtic air is produced, cauſing ſpaſms and colics; and that, as air is an elementary or conſtituent part in all bodies, it is probable that thoſe extreme pains felt in the extremities, are moſtly flatulent, ſince by rubbing the affected parts the wind is often removed or expelled.

There are ſeveral remarks in this production worth attending to by thoſe who are intereſted in the diſcovery of the cauſe of the *Devonſhire* Colic. In reſpect to the uſe of lead in the preſſes, the fact is contradicted by Mr. *Worth*, a conſiderable cyder-

cyder-maker, and by others; and at the ſame time it is proved, that the diſeaſe was predominant amongſt thoſe who drank the cyder where no lead was uſed in the apparatus. How to reconcile theſe jarring teſtimonies we know not.

Mr. *Geach* combats Dr. *Baker*'s argument drawn from the example of jockeys drinking vinegar without injury, by obſerving, that the violent exerciſe which they uſe, in all probability prevents the evils to be expected from it. Our author then paſſes by a quick tranſition from jockeys to girls, and ſays, "That certain it is, many of the latter "have deſtroyed their health, loſt the uſe of their "limbs, and oftentimes their lives, by the frequent uſe of vinegar, in order to make themſelves lean: and this may ſerve to anſwer that "argument concerning chlorotic girls (advanced "by Dr. *Baker*) who, though they may not be "troubled with *ſevere* colics from the acids and "traſh which they uſe, are nevertheleſs ſeldom "free from colical complaints; their hands too "are often ſo enervated as to be utterly unable to "graſp any thing, to carry a glaſs to their mouths, "or thread a needle. A young lady was lately "under Dr. *Huxham*'s care for a diſorder of this "kind, and was cured by anti-acids and the uſe "of the cold bath." We may however, with due deference obſerve, that other remedies for this diſeaſe in girls have been recommended by ſome able phyſicians, and uſed with great ſucceſs.

*An*

*An Anſwer to the Obſervations of Mr.* Geach, *and the Curſory Remarks of Mr.* Alcock *on Dr.* Baker's *Eſſay on the Endemial Colic of* Devonſhire, *by Dr.* Saunders. E. Dilly *in the* Poultry, *pr.* 1*s.*

IF Mr. *Geach* hath appeared as a *ſtrong* advocate for Dr. *Huxham*'s theory, Dr. *Saunders* here enters the liſts as a very *warm* opponent to Mr. *Geach*, in favour of Dr. *Baker*. This great medical duel ſeems to be chiefly fought by the ſeconds. It were to be wiſhed however, when gentlemen of the faculty happen to differ in opinion (a circumſtance not uncommon) that they would obſerve a regard to decorum in their controverſies. For want of this neceſſary caution Dr. *Saunders*'s performance will appear to many as containing more invective than argument; for inſtance, in page the firſt, he ſays, "The former (viz. Mr. *Geach*) ap-"pears to me in the character of one who is "deſirous of neglecting no opportunity of pay-"ing every mark of reſpect and adulation to a "great name; for his portion of this curious "compound, contains little, very little more than "a dull, unintereſting, uninſtructive repetition of "a vain unſubſtantial theory, together with an "addition of much falſe reaſoning from his own "private ſtock, and an abundance of miſrepre-"ſentation." Again, "indeed this man's argu-"ments do every where appear to me to reſemble "thoſe ſlender incorporeal beings, thoſe *tenues* "*ſine corpore vitæ* which the poet ſuppoſes to flut-

ter

" ter about in the other world, *cava ſub imagine* " *formæ.*"

After ſuch an exordium, what can be expected? Moderation and temper are the ſureſt guides to truth, and when authors depart from thoſe guides, it is but unprofitable labour to fatigue ourſelves with hunting after their opinions.

But we now think it high time to diſmiſs this ſubject; leaving the deciſion of the controverſy, whether acid or lead is the cauſe of the *Devonſhire* Colic to future proofs: as to what Mr. *Moore* obſerves concerning the leaden ſhot in the bottles containing the cyder that was made uſe of in one of Dr. *Baker*'s experiments, we think it tends rather to confirm the general poſition of the doctor; for ſuppoſing the cyder could be impregnated with ſome portion of the mineral, by a ſmall quantity of lead molded in a globular compact form, there is much more probability of its imbibing a greater quantity of the metalic particles from an expanded ſurface, uſed in the manner as Dr. *Baker* tells us it is in the *Devonſhire* preſſes.

I proceed now to give a ſummary view of the other medical productions in 1767, reſerving a more particular account for ſome future opportunity. The introduction of *the new method of Inoculation* gave riſe to a conſiderable number of pamphlets, ſome of them wrote by men of eminence. Mankind ſeemed to be particularly inquiſitive about this ſubject, and ſome of the faculty perhaps were not very well pleaſed to find ſo beneficial a practice, in great meaſure, taken out of their hands

hands, and carried on to an extent beyond any example before in *England*, tho' in ſome reſpects in a ridiculous manner, and ſavouring too much of empiriciſm. As this innovation will conſtitute a remarkable æra in the medical world, it is propoſed hereafter to give a clear, circumſtantial, but ſuccinct account of the riſe and progreſs *of the* Suttonian *or new method of inoculation*, together with ſuch a diſquiſition, concerning the principles and merits of it, as may bring the whole matter into one point of view, and ſet it in a proper light; Therefore we ſhall poſtpone our comments upon what hath been publiſhed, till we come to diſcuſs the ſubject more fully in another place.*

Beſides the pamphlets upon inoculation we were favoured the laſt year with ſeveral miſcellaneous productions by medical gentlemen. Mr. *Kirkland*, from ſome paſſages in the antients, recommended in an eſſay,† the proſecution of the cold method in the treatment of fevers, to an extreme which few practitioners, nor perhaps himſelf, will venture to follow, eſpecially in this country; Dr. *Glaſs* had before§ given us ſome very uſeful hints relative to the effects of cold air and cold water in fevers, and indeed the ſubject deſerves the moſt ſe-

* I ſhall juſt mention the names of the writers upon inoculation, in the year 1767, viz. *Baker, Dimſdale, Glaſs, Chandler, Ruſton, Bromfield, Tomlinſon, Langton, Hollwell, Watts, Gatti, Maty.*

† An Eſſay towards an Improvement in the Cure of thoſe Diſeaſes which are the Cauſe of Fevers, by *T. Kirkland*, Surgeon.

§ In his firſt Letter to Dr. *Baker*.

rious

rious conſideration. We muſt not expect in fevers ariſing from deep or latent cauſes, from diſeaſes in the viſcera for inſtance, or when nature means a critical diſcharge, that the meer extinction of heat by drinking cold water, or by having it thrown upon the ſurface of the body, will prove a radical cure, or even a ſafe method of attempting it. If that was all which is neceſſary to be done in fevers, thoſe many accurate and judicious remarks in reſpect to their different ſources, ſtages, and ſymptoms, handed down by the antients themſelves, would be of little uſe, when ſo eaſy a remedy would ſerve every purpoſe: but the caſe is not ſo: the diverſity of cauſes, effects, and conſtitutions, together with various other circumſtances, abſolutely preclude all poſſibility of eſtabliſhing any one grand febrifuge to ſuit all caſes.*

* The remaining productions of the year 1767, being too numerous to be brought under conſideration in this article at preſent, and ſome of them deſerving a more minute examination, I ſhall therefore only give the titles of them now in this note, and proceed with the account of Medical and Chirurgical Caſes.

Medical Eſſays, &c. by Dr. *Biſſet*.—Practical Directions, by Dr. *Harvie*.—London Medical Obſervations, Vol. 3.—A Review of the Venereal Diſeaſe and its Remedies, by *William Fordyce*, Surgeon.—An Hiſtorical Account of a New Method of Curing the Scurvy at Sea, by *D. Macbride*, M.D.—Elements of the Practice of Phyſic, by *G. Fordyce*, M. D.—Eſſays Medical and Experimental, by, *T. Percival*, M.D.—The Gout, by *R. Ingram*, Surgeon.—A Treatiſe on Diet, by *F. De Valangin*, M.D.

# Medical *and* Chirurgical Caſes.

## *Obſervations on the* Paronychia.

HOWEVER ſlight and unimportant this diſeaſe may appear, comparatively with many others that afflict mankind, we ſhall frequently find upon an attentive examination of the nature, cauſes and conſequences of it, that our utmoſt care and even ſkill muſt be exerted to prevent thoſe evils which may ariſe from this painful and ſometimes dangerous malady. For altho' the firſt aſpect of a ſwelling, and the firſt perception of a pritching heat and pain in the extremity of one of the fingers only, ſeem to be circumſtances too inconſiderable to deſerve the notice of ſurgeons, yet the concomitant and previous ſymptoms, if duly enquired into, will quickly excite a more ſerious regard, and prove the neceſſity of tracing this as well as other external diſorders, to their true and proper ſource, that for the honour of the profeſſion, effectual remedies may be timely adminiſtered. Indeed there is hardly any caſe requiring chirurgical aſſiſtance, but what derives it's cauſes, ſymptoms and appearances, from the grand ſource of the conſtitution, and therefore the ſtate and habit of body muſt be the firſt ob-

ject of our attention on all occaſions wherein we are conſulted.

Admitting the truth of this poſition, which experience ſeems to confirm, with as few exceptions as any one general rule is liable to, we ſhall of courſe become ſenſible of the great uſe and excellence of chirurgical knowledge, which as an unerring clue leads us from facts perceptible and plain to our ſenſes, to the diſcovery of thoſe remoter cauſes abſolutely neceſſary to be underſtood, by the diligent inveſtigation of which we ſhall be enabled to aſcertain the proper method of cure in all caſes, and eſtabliſh our practice upon a true and ſolid foundation: Thus directed, our obſervation and experience will more ſurely point out all the particular and various effects ariſing from various cauſes in different conſtitutions, which are to be explained by the ſame univerſal principle of reaſoning, however diverſified and modified ſuch effects may chance to be on numberleſs occaſions. No juſt prognoſtic can be delivered from a meer ſuperficial view of external appearances. In reſpect to the diſeaſe in queſtion, for inſtance, we muſt not conſider it as local only, but as complicated (as it generally if not always is) with ſymptoms of ſuch a nature as plainly denote its origin to be from a bad ſtate of the body. This rule of judging may be extended to almoſt every caſe under chirurgical inſpection. Every wound, every ulcer, every tumour, may in ſome meaſure be conſidered as an index of the habit: therefore we ought always to be upon our guard, and examine even

even the minuteſt part, external appearance, or excreſcence of the human body, as they may depend upon or be derived from the general ſyſtem.

Upon conſulting experience we cannot heſitate reckoning the Paronychia in general as the effect of a diſtempered conſtitution: and conſidering the different ſpecies of it, together with the various conſequences and difficulties which often occur during its whole progreſs, perhaps ſome obſervations relative to this ſeemingly trifling, tho' frequently important diſeaſe, may not be altogether unacceptable. Many authors have thought proper to beſtow ſome part of their attention upon this ſubject, particularly *Wiſeman*, *Le Dran*, and *Heiſter*. I am ſenſible how dangerous it is to take up the pen after ſuch great maſters; but notwithſtanding this, if the leaſt uſeful hint can be drawn from the labours even of the meaneſt in the profeſſion, the attempt however unequal, will be excuſed, and the author acquitted of preſumption.

* *Wiſeman* deſcribes the Paronychia thus, "*Paronychia*,

* Chirurgical Treatiſes, Page 54.

I muſt confeſs that I cannot help entertaining a partiality, and even giving a preference to our great countryman on moſt occaſions; his deſcriptions are clear and preciſe, his diſtinctions accurate and juſt, and his practice founded upon rational principles; in this part as well as the reſt of his excellent works, his genius and knowledge as a Surgeon, are eminently conſpicuous. *England*, fertile as ſhe is in producing able men, cannot boaſt of a better ſurgeon, or of a more uſeful writer in his profeſſion, conſidering the time in which he lived. The peruſal therefore of his Chirurgical Treatiſes is earneſtly recommended to all young ſurgeons, tho' I except againſt the compoſition of his preſcriptive formulæ in general.

" *ronychia*, ſo called by the Greeks is a ſmall " ſwelling about the nails and ends of the fingers, " known amongſt the Latins by the name of *Pa-* " *naritium*: by the vulgar people amongſt us it " is generally called a *Whitloe*."

" There are two ſorts of *Paronychiæ*; they both " affect one and the ſame part, and are fre- " quently taken one for the other, but are very " different in their ſymptoms. We ſhall diſtin- " guiſh them by the names of *benign* and *malign*. " The former riſe ſuperficially under the cuticula " and come ſuddenly to ſuppuration; whereas " the *malign Paronychia* lieth deep amongſt the " ligaments and tendons, and is ſlow in coming " to maturity. I ſuppoſe it is that which is com- " monly called a *felon*.

" The *benign* or milder ſpecies takes its origi- " nal from a bilious hot ſerum: the other is com- " monly ſaid to proceed from aduſtion in the " blood, with a mixture of choler or ſalt " phlegm.*

" *Paronychiæ* may be truly reckoned amongſt " the inflammations, they ariſing with great pain " and burning heat, with pulſation and tenſion. " The *benign* ſoon comes to maturation, and may " be diſcerned by change of colour in the *cuticula*, " the matter appearing under it as in a bliſter. " The ſigns of a *malign Paronychia* are an intenſe " vehement pain, deep amongſt the ligaments

* Or from an inflammatory or putrid ſtate of the blood, as the more modern authors would expreſs it.

" and

" and tendons, with fever, fainting, and a ſlow " ſuppuration.

" The *prognoſtic* may be made by what hath " been delivered of them, *viz.* that the *benign* " cometh ſoon to ſuppuration, and is eaſily cured: " the worſt danger that can happen is but the " loſs of a nail.

" The other which lieth deep is of a malign " quality; and if it be not ſpeedily removed, " will corrupt the *Perioſteum*, rot the bone, and " ſoon extend its putrefaction to the next joint, " and threaten the welfare of the whole hand."

This definition however conciſe, is ſufficiently clear, and ſeems to be all that is neceſſary to be made upon the occaſion, comprehending the different ſtages of the diſeaſe, from the moſt trifling appearance under the ſkin only, to the deeper ſeat of it amongſt the ligaments and tendons, extending from the finger to the arm. *Le Dran* is more particular in his diviſion,* which he gives under four diſtinct heads. The *firſt ſpecies* affecting the ſkin only round the nail; the *ſecond* being formed between the ſkin and flexor tendon; the *third* occaſioning a putrefaction of the ſheath of the tendon alone, or the tendon along with it; the *fourth* proceeding from a diſeaſe of the bone, in conſequence of which the perioſteum ſoon putrefies, or is attacked with an eryſipelas, which degenerates into a putrefaction. He deſcribes the cauſes, prognoſtics, and methods of cure in each ſpecies in ſuch a manner as proves him maſter of his ſub-

* *Le Drans* Operations in Surgery, Page 412.

ject

ject, and indeed the whole chapter is juſtly eſteemed an excellent performance. In one point however his account appears defective: which is his ſilence in reſpect to the internal cauſes of this diſeaſe. For inſtance, in the *ſecond* ſpecies he ſays, "This like other phlegmons *may* proceed from "an internal cauſe, but it is generally owing to "an external accident, as a puncture, excoriation, contuſion, &c. the ſkin and fat being irritated, or punctured become inflamed, and the "inflammation ſpreading to the reſt of the fat, "the whole finger ſwells." Again, "The ſymptoms are more acute than in other phlegmons, "for the following reaſons: the ſkin of the finger is of a firm cloſe texture, and therefore "cannot give way to the increaſed ſize of inflamed parts, which it inc'oſes, conſequently the tenſion, pain and fever, muſt be ſo much the more "violent." But with all due deference to this able ſurgeon, let me aſk, may not theſe ſymptoms be accounted for from an internal cauſe? inſtead of the fat being irritated by puncture, (a doubtful poſition) may we not with more probability ſuppoſe, that in theſe caſes it is made the bed wherein by a *metaſtaſis* from the blood the humours are depoſited? are not ſimilar effects often produced when no puncture or accident hath brought them on? certainly either an inflammatory or putrid ſtate of body is in general the prediſpoſing cauſe, though I admit that a caſual puncture or contuſion may be the viſible means of exciting

exciting ſo dangerous an irritation in conſtitutions already rendered *irritable* from ſome internal or latent diſeaſe.

To proceed; in the *third* ſpecies he obſerves, "I do not think that an eryſipelas, affecting theſe "parts, and forming a *Panaris*, can proceed from "an internal cauſe, ſince we don't find that the "other tendons are ſubject to this diſorder;* but "it may be owing to a puncture which hath affect-"ed the tendon, together with the ſheath, or even "the ſheath only. Theſe two parts we know are "blended together at the third joint, where the "tendon is inſerted into the bone; it is no won-"der therefore if an inflammation of the one "ſhould extend to the other. The inflammation "ſpreads afterwards all over the hand, and along "the muſcle from which the tendon ariſes, as "far as to the forearm, ſometimes even to the "whole arm, forming an eryſipelatous inflation, "which terminates under the armpits, and ſwells "the axillary glands. The pain and fever are "then very violent, attended ſometimes with a de-"lirium and convulſions." I have quoted the whole paſſage, becauſe no better deſcription can be given of the progreſs of this diſeaſe in its malignant ſtate; but we muſt obſerve that it relates only to the effects, leaving the true cauſe ſtill a diſputable point. Therefore, if I ſhould diſſent from ſo celebrated an author myſelf, I by no means

* This reaſoning is not concluſive; how often do we find inflammation and ſuppuration from internal cauſes fixing upon ſome *one* particular part?

preſume

preſume to dictate to others; for in aſcribing theſe effects to an internal cauſe, contrary to *Le Dran*'s opinion, I am only guided by what my own weaker reaſon ſuggeſts from the experience I have had, as ſhall be more particularly explained by and by.

*Heiſter* differs from *Le Dran* in the diviſion of this ſubject,* confining himſelf to *three* ſpecies only, but is not ſo accurate and exact in his deſcription of them. He mentions the *ſecond* ſpecies as affecting the *perioſteum*, and the *third* or laſt as infecting the nervous involucra or coverings of the tendons belonging to the flexor muſcles of the fingers, and this he calls the worſt kind. But *Le Dran*, with more propriety attributes the worſt ſymptoms to the diſeaſed *perioſteum*, in which he agrees with *Wiſeman*. *Heiſter* however ſeems to pay more attention to internal cauſes, admitting that an acrimony of the blood and lymph, induces a tenſe fibre, and is aggravated by a heating regimen, or an abuſe of the non-naturals. In reſpect to the method of cure, he quotes *Garengeot* with approbation, except in his propoſing an early inciſion, to which *Heiſter* objects. But the practice of our beſt ſurgeons juſtifies *Garengeot*'s method.

After thus explaining the ſentiments of three great ſurgeons, I am inclined to adopt the diviſion made by *Wiſeman* into two ſpecies only, the *benign* and *malign*, as including all other diſtinctions. Or perhaps we might with as much propriety ſay,

* *Heiſter*'s Surgery, Part 2, Page 324.

the

the *inflammatory* and *putrid* kinds, the concomitant ſymptoms often denoting theſe two oppoſite diſpoſitions, requiring different methods of treatment. The cauſe of the *Paronychia* therefore, generally proceeds from ſome internal diſeaſe in the habit, which nature endeavours to expel, by throwing the morbific matter from the ſanguinary ſyſtem; and as the axillary artery and the branches of it, going to the hand and fingers, are nearer the great ſource of the circulation, conſequently the humour is more immediately depoſited in thoſe extremities, where leſs reſiſtance is made: for the feet being harder and at greater diſtance, the diſeaſe ſeldom is carried ſo far, or is able to break forth in thoſe callous parts. For theſe reaſons the fingers are generally affected, and the veſſels at the end of them being obſtructed, very ſevere pains quickly enſue, the ſoft nervous *papillæ*, from their extreme ſenſibility, ſuffering greatly by the irritation, ſo that we need not wonder at the feveriſh ſymptoms, and the faintneſs which commonly attend this diſorder.

From theſe ſymptoms as well as other diagnoſtics, the *Paronychia*, even in its ſlighteſt and earlieſt appearance, will be proved to ariſe from an internal cauſe. I muſt own at leaſt, that not one caſe of this nature hath occurred to me but what betrayed ſome default or other in the conſtitution of the patient. For inſtance, even in the *firſt ſpecies* of the diſeaſe deſcribed by *Le Dran*, when a little matter is collected under the ſkin round the nail, the ſurgeon will find, upon examination, that

the patient hath been troubled with chillineſs, or ſome ſlight feveriſh ſymptoms, previous to the formation of matter there; which matter is lodged ſuperficially only, and imperfectly digeſted, becauſe the diſeaſe in the habit as yet hath not acquired much acrimony. But even in this ſtate we may obſerve the wonderful ſympathy which prevails throughout the whole body,* evidently demonſtrating the relation or dependance one part has upon another, ſo that the leaſt external inflammation in the remoteſt extremities, ſeldom ariſes except when the general habit is affected; much leſs can thoſe ſeverer ſymptoms of pain and abſceſs ſupervene, but from an internal diſeaſe, the nature of which is to be determined from the degree of fever which attends, and from ſeveral other circumſtances according to the conſtitution, age, and ſex of the patient.

Thus the prognoſtic is to be taken from internal as well as external ſymptoms, the former being previous to the latter. But it muſt be remarked, that there is a very ſtrong propenſity in moſt people to deceive themſelves and the ſurgeon, by attributing conſtitutional effects to external injuries; for inſtance, in ſcrophulous ſwellings affecting the joints, in the breaking out of old ulcers,

* This conſent of parts is communicated either by the nerves or through the *medium* of the mucous membrane, to organs ſituated at a diſtance from each other in the body. For inſtance, I have obſerved a nephritic fit irritating the bladder, to be preceded by a pain in the ſtomach, reſembling what is called the heart-burn, and relieved by abſorbents.

in

in cancerous appearances, and various other caſes, they will recollect ſome little trifling blow or bruiſe which they have received, perhaps long ago, and impute to thoſe inſignificant accidents, what in reality proceeds from more dangerous cauſes; neglecting to obſerve, and unwilling to be convinced of any conſtitutional malady. This kind of deception is eaſily guarded againſt by the practical ſurgeon, whoſe obſervation and enquiries will ſoon enable him to diſcover the true ſtate of the caſe: and therefore it will behove him to ſhew his judgment and ſecure his reputation, by an early prognoſtic drawn from a knowledge of the cauſes of every diſeaſe under his inſpection, and by accurately examining every particular relative to the conſtitution of the patient, the neceſſity of this caution being evident from a thouſand circumſtances in practice.

How frequently do we find the moſt terrible and dangerous effects ſucceeding very trifling wounds in ſome habits? for inſtance, does not a puncture in the finger, or ſome other extremity of the body, often terminate in a mortification? how many caſes are related by authors illuſtrating this ſame ſubject, and juſtly aſcribing to a diſeaſed conſtitution, what otherwiſe would diſgrace the ſurgeon? quotations are unneceſſary, becauſe the matter is clear. Such is the difference in conſtitutions, and ſuch various circumſtances happen in the beſt, that altho' ſome will endure large wounds and contuſions admitting an eaſy cure, without any unfavourable ſymptoms, yet in others a meer

ſcratch will prove mortal.* Therefore among theſe ſlighter injuries, whoſe conſequences are de-

* An inſtance of which take as follows: On *Dec.* 15, a man about 30 Years of age applied for aſſiſtance, having divided a branch of the artery on the inner ſide of the little finger, towards the extremity: the wound was ſmall, but the hæmorrhage was conſiderable. Upon examination of the patient I perceived that the habit of body was bad, he had been uſed to hard drinking, eſpecially of ſpirituous liquors (being alſo naturally infirm and deformed) his pulſe was quick with a tremor of the hands, ſickneſs of the ſtomach, feveriſh heat and thirſt, and the blood remarkably thin. After opening a vein in the arm to abate the *impetus* in the circulation, which was evident by a violent throbbing in the finger, the wound was dreſſed with lint, dipped in *Balſ. Traumat.* a compreſs wet with *ſp. vin.* applied along the direction of the wounded artery, and another compreſs laid upon the ulnar artery, properly and equally rolled all up the arm, which was kept in a ſling, and the patient enjoined reſt, with a ſuitable regimen. This method of bandage was obſerved for ſix days, notwithſtanding which the wound frequently bled, and of courſe no digeſtion came on: the fever ran high; the veſſel was too inconſiderable to tie up, nor in the feveriſh ſtate of the patient would that expedient have availed. The bleeding ſtill returned by fits, in ſpite of a tighter compreſſion by bandage, which it was eaſy to apply with all poſſible advantage. The fever increaſing, on *Dec.* 22, I bled him again, ordered *mixt. ſalin. elix. vitriol.* and on the 23d, obſerving a proper opportunity, the *cort. Peruv.* was adminiſtered. During the whole time anodynes were given, and yet his ſtomach continued uneaſy, and frequent vomitings came on. The bleeding being ſtopped a few days, ſuddenly returned again, and in ſhort all methods proving ineffectual to ſubdue the fever and bring on digeſtion, on the 1ſt of January the patient died.

From the very firſt examination of this caſe I took eſpecial care to prognoſticate and explain the future danger to ſome of the patients friends, who otherwiſe (tho' ſenſible people) might have blamed the ſurgeon, and imputed to his unſkilfulneſs, what unavoidably muſt happen from the circumſtances of habit and conſtitution.

rived

rived from the habit, the *Paronychia* upon the ſame principles, certainly deſerves our attention, to the external treatment of which having mentioned its internal origin, I now proceed.

*Jan.* 10, *E. G.* a woman aged 27, of a thin habit, came under my care, having a *Paronychia* at the end of the third finger, attended with violent throbbing pain, inflammation, and a ſtiffneſs of the firſt joint. Having examined into the circumſtances of her health, I found that ſhe had been attacked with feveriſh ſymptoms, chillineſs, and a nauſea at the ſtomach a few days before, therefore I told her the *Paronychia* proceeded from an internal cauſe, and that the cure would principally depend upon ſubduing that diſeaſe. An inciſion was immediately made down to the bone,* in conformity to the beſt practice, the hand bathed in warm water, and the wound dreſſed in an eaſy manner, with an emollient poultice over the whole. An anodyne pill was given at night, and repeated at ſuch intervals as to prevent pain. The next day the *primæ viæ* were unloaded, by giving a few grains of *calomel* and a lenient purgative, but the fever being troubleſome, and attended

* Not one fibre of the human body ought to be divided without giving ſufficient reaſons for uſing the knife, therefore it is neceſſary to obſerve on this occaſion, that as the veſſels are obſtructed, and the nervous papillæ diſtended and irritated in a *Paronychia*, an inciſion is always proper to give the matter vent, or if no matter is formed, yet the bleeding veſſels will be conſiderably relieved by the diſcharge, and by bathing the hand in warm water.

with lowneſs and ſickneſs, ſhe began to take the the following mixture on the 12th, after a gentle vomit:

℞ Spir. minderer. Aq. menth. pip. aa ℥iß.
Aq. alex. ſimp. ℥iii, conf. cardiac. ʒi Pulv.
* febr. ſpecif. ʒß Tinct. cort. *Peruv. Huxh.*
ſyr. balſam. aa ℥i m—dentur cochl. iii 6ta
quaq. hora.

Along with this mixture ſhe drank freely of weak wine-wey, keeping in bed with a gentle perſpiration. Thus the fever was in great meaſure ſubdued, and on the 14th the *Cort. Peruv.* alone was ordered. Mean time the wound began to diſcharge, and was dreſſed with mild digeſtive, and *cerat.* over it; and as the fleſhy fibres protruded conſiderably from the wound, compreſſes dipped in brandy, properly adapted were applied on each ſide the finger, with moderate bandage to keep down the fungus; which alſo began to ſhoot forth from under the nail, as generally happens in theſe caſes, but it was checked by gently preſſing dry lint upon it properly ſecured. This method ſucceeds very well in general, and is far preferable to the *merc. præcip. rub.*† too much uſed on theſe occaſions, it being apt to excite pain

* This is made with calx. antimon. or pulv. e chel. 69. c. or equal parts of each, with tart. emet. the proportion being ten grains of the calx to one grain of tart. emet. it ſerves as a ſubſtitute to *James*'s Powder.

† I do not altogether approve of the application of *merc. præcip. rub.* becauſe every intention of it may as well be anſwered by milder digeſtives, as ſhall further be explained under the article of ulcers.

and

and irritation. In conſequence of kind digeſtion, the inflammation was abated, and the joint became more eaſily flexible.* But however on the 19th the fever returned again with pain and bleeding in the wound, and throbbing in the finger, attended with ſhiverings, and afterwards heat and thirſt; the external and internal ſymptoms correſponding with each other, the ſtate of the wound depending upon the ſtate of the patient's health. It was neceſſary therefore to repeat the *Pulv. Febr. Spec.* and encourage perſpiration again, and after giving another doſe or two of the *Calomel* and lenient purgative, the uſe of the *Cortex* was reſumed on the 22d. On the 24th the bleeding ceaſed, and matter appeared: On the 26th a very ſmall piece of bone from the extremity of the finger exfoliated and came away thro' the wound, this probably occaſioned the ſecond fever: ſhe ſtill continued in the uſe of the *Cort. Peruv.* and ſo bad and relaxed was the habit of body (having likewiſe the *fluor albus* at the ſame time) that the wound was not entirely cloſed 'till *March* 1. This account tho' it may ſeem too minute and prolix for ſo trifling a caſe, yet certainly gives an idea of what generally happens on theſe occaſions, and evidently proves the truth of the firſt poſition advanced, that the *Paronychia* ariſes from an internal

* I was very doubtful all along, whether the firſt joint would not remain ſtiff, an inconvenience which frequently happens from a *Paronychia*, notwithſtanding all poſſible care taken to prevent it.

cauſe

cauſe and frequently proves very troubleſome and even dangerous.*

In ſome caſes where a putrid habit of body ſtrongly predominates, we find that the diſeaſe in the finger generally extends to the hand; very ugly fungus protrudes from the ſore, the edges of the wound are flabby, the tendons ſlough of, and the diſcharge is very copious and ill conditioned. Indeed the matter is often ſo acrimonious that by its corrupting the *ſynovia*, one or more joints of the fingers become ſtiff, an event always to be apprehended when we perceive a crackling in the joint, on the leaſt motion of the finger. Under theſe circumſtances it is requiſite that we ſhould be very attentive to the internal ſymptoms, and after we have ſubdued the fever to adminiſter the Cort. Peruv. with all poſſible expedition. In reſpect to the dreſſings when the tendon is laid bare, lint dipped in ſome warm balſam ſhould be firſt applied, and compreſſes wet with ſpirits, are to be properly adapted and rolled on, that the flabby parts may be kept cloſer together, the fibres ſtrengthened, and the matter prevented as much as poſſible from lodging amongſt the tendons. Indeed in almoſt every ſtate of the *Paronychia* I prefer ſpirituous applications, except juſt at firſt when the inflammation is great, and then

* *Paronychium* atrox interdum, & calamitoſum eſt vitium, id quod evenit primum tum privata & propria ejuſdem cacoëthia, tum adjuvante prava habitus corporis aut partis alicujus principis conſtitutione. *Severin. lib.* 2, *part.* 1, *c.* 70.

emollients

emollients are proper, obſerving in this particular as well as the internal treatment to make a due diſtinction between the inflammatory and putrid ſpecies.*

In other caſes wherein from an exceeding bad habit of body, the matter is formed in large quantities, and inſinuates itſelf from the finger to the hand, and from thence to the arm; it is ſometimes difficult to determine whether the intervening ligaments by which the tendons are confined, (eſpecially at the wriſt) ſhould be divided or not; tho' in general it is a rule with ſurgeons to purſue the matter wherever it ſpreads, and to lay open every ſinus.

On *September* 27, 1767, a man of a ſcorbutic habit of body, about 45 years of age, extremely addicted to hard drinking, was ſeized with a ſhivering fit and vomiting; on the 29th he perceived a ſwelling in the palm of his hand, attended with violent pain all up the arm: I being conſulted, and obſerving the nature of the caſe, and foreſeeing the difficulties which would ariſe in conſequence of the patient's bad habit of body, imme-

* The common people generally apply turpentine at firſt, which always increaſes the inflammation, and aggravates the pain. *Hildanus* † adviſes fomentation, and then to make an inciſion upon the part, which is certainly good practice. Dr. *Friend* in his Hiſt. Medic. p. 393, condemns the application of ſtrong ſuppuratives, and ſays, "Chirurgi noſtrates tumorem hunc magno cum judicio ſecundum digiti longitudinem, ex altera tendinis parte, aperiunt: quo facto, & multum doloris & diſcrimen omne æger effugit.

† *Hild. Cent. Obſ* 97.

diately delivered ſuch a prognoſtic as would afterwards juſtify myſelf, and propoſed to make an inciſion directly, ſuſpecting that matter was already formed, tho' it lay very deep. But the patient refuſing to comply, an emollient poultice was laid on, he was bled and took ſome opening medicine, and at night, as the pain was very acute, an anodyne pill was given. On *October* 3, an inciſion being made, a great quantity of matter was diſcharged, his pulſe ſtill continued full, for which reaſon bleeding was repeated, and all other proper meaſures taken to abate the fever; the arm being placed in a ſling, or laid upon a pillow, in as eaſy a poſition as poſſible. As the matter was ill-conditioned, and the aſpect of the patient very unhealthy, I was ſolicitous to give the *Cortex Peruv.* as ſoon as ever the fever ſhewed the leaſt ſigns of intermiſſion, and accordingly he began to take it on the 4th, joined with *pulv. rhei* and *ſal. nitr.* in proper proportions. On the 5th the inflammatory ſymptoms ſeemed to increaſe, altho' the diſcharge was copious; the arm ſwelled greatly at the elbow, and the lymphatic ſyſtem being affected, the glands in the *axilla* became enlarged and painful, at the ſame time a tumour began to appear above the wriſt amongſt the tendons, and in the direction of the ulnar artery.

Repet. V. S. hodie.

Repet. Pulv. *Cort. Peruv.* cum rheo & nitro.

Repet. Pil. Narcot. (quæ gr. i, opii habeat) pro re nata.

On

On the 6th, after great pain and reſtleſſneſs, (tho' abated by the opiate) I perceived matter in the new tumour, and immediately made a free inciſion, bathing the arm afterwards in warm water, and ſuffering the wound to bleed a conſiderable quantity. On the 7th, a great deal of matter was diſcharged from the laſt inciſion, tho' not of a good conſiſtence. The dreſſings were light and gentle, and an emollient fomentation and poultice uſed as at firſt. The pulſe being full, *Repet. v. ſ.* this day likewiſe I perceived, that there was a communication between the two inciſions, the matter running under the carpal ligament, and flowing equally out of both wounds upon preſſure made betwixt them. On the 8th and 9th, the ſwelling being conſiderably abated, compreſſes dipped in brandy were applied all along the arm, with a moderate bandage, ſo contrived as to endeavour to promote a union of parts at the wriſt, being unwilling to divide the carpal ligament. The fever was abated, and the patient continued taking the *Cortex*. Finding, after three or four days trial that it was impracticable to unite the parts at the wriſt, and prevent the communication between the two wounds, I reſolved at length to lay the whole open. In this operation, as the ſinus ran very deep, I was apprehenſive of wounding the ulnar artery, from which accident, in the bad ſtate of health of the patient, ſome diſagreeable conſequences might enſue. And beſides, the integuments and all the parts were ſo ſwelled and indurated, that it was

difficult to diſtinguiſh one from another; a circumſtance which frequently occurs in practice, ſometimes puzzling the niceſt and moſt accurate anatomical ſkill, which cannot then ſo exactly determine the ſituation or courſe of thoſe veſſels, which we would wiſh to avoid wounding for ſeveral reaſons. The director (an inſtrument not ſo much in uſe as formerly) was cautiouſly introduced, and an inciſion made the whole length of the ſinus, laying both wounds entirely into one, attended with a copious but not dangerous hæmorhage. Thus the work was now fairly compleated, and the management of the caſe depended upon eaſier principles. On the third day after the operation, the dreſſings were in part removed, ſuch as come readily off, leaving the reſt to be looſened by the diſcharge, which appeared very favourable. No material difficulty afterwards occurred, and the wound was healed in due time by mild applications, aſſiſted by proper bandage. The patient ſuffered no inconvenience from the diviſion of the carpal ligament, and notwithſtanding ſome tendons were laid bare, he recovered the perfect uſe of his hand.

In moſt caſes of the *Paronychia*, the lymphatic veſſels from the finger to the axillary gland are affected with ſwelling and pain, which ſymptoms abate in proportion as the fever is ſubdued. Indeed the lymphatic ſyſtem may be diſordered, both from internal and external cauſes, producing in that ſyſtem ſimilar effects, tho' operating differently upon the body. In one caſe, the virus or acri-

mony already predominant in the habit, may be returned into the blood by abſorption of matter from any wound or ulcer, in a bad ſtate: in the other, the lymphatics become the vehicle, by which ſome external poiſon is conveyed to the habit. Thus we ſee in old ulcers, attended with inflammation and pain, from ſome diſeaſe in the conſtitution, that the whole leg will frequently ſwell, the diſcharge will ſuddenly be abſorbed, the neighbouring glands be inflamed, and a fever in conſequence ariſe. Again we may obſerve, that by the ſmalleſt puncture, the poiſon infuſed, either from venemous inſects and animals, or by introducing the variolous infection, will immediately affect the lymphatic veſſels and glands, and ſoon afterwards be poured into the blood. Theſe circumſtances are mentioned to excite the attention of young practitioners, that they may be enabled to account for thoſe various ſymptoms and appearances, occurring in all caſes, wherein the lymphatic ſyſtem is concerned, the number of which is very great, and to ſhew the neceſſity of underſtanding well the nature, uſe, and courſe of thoſe veſſels, expreſsly mentioned by *Hoffman*, and (waving all diſputes about the firſt diſcovery of them) extremely well illuſtrated by Dr. *Hunter*.*

It

* In reſpect to the nature and uſe of the lymphatics, I think that whatever is neceſſary to be known about them, at leaſt as far as relates to practice, may be found in *Bartholin* and *Hoffman*, particularly the latter. His deſcription of them is ſo accurate, that I cannot help quoting ſome paſſages

It is now time to conclude this article, having ſufficiently explained the cauſe and the progreſs of the *Paronychia*, in all its ſtages. Caſes indeed may differ in ſome particulars, but the general principles will remain the ſame. If it ſhould be remarked, that this ſeems a matter too trifling to deſerve ſo much notice; I would urge that argument as the very reaſon for dwelling ſo long upon it. When real danger lurks concealed under a ſpecious or ſlight external appearance, then it

paſſages from it; indeed, whoever reads the whole chapter will not be very ſolicitous concerning the merits of a late controverſy, nor perhaps, will he ſuppoſe that either of the diſputants can have any juſt claim to originality, or to the title of firſt diſcoverers.

Duplex eſt origo vaſorum lymphaticorum, quædam ex ipſis arteriis prodeunt, alia *ex poroſa & celluloſa partium ſubſtantia* naſcuntur.

Lymphatica quæ *ex partium ſubſtantia* oriuntur, aquoſam ſucci nutritii partem *reſorbent* ac revehunt ad cor.

Quia lymphatica vaſa *ex ſubſtantia partium* naſcuntur, quæ ibi ſubſiſtentem aquoſam partem *revehunt*: hinc dari ratio poteſt, quare ab uſu fortiorum purgantium vel diureticorum, in cachecticis copioſum humidum ibi ſubſiſtens in hos canales *reſorberi* & per inteſtinorum glandulas expurgari poſſit.

*Revehunt* vero omnia lymphatica ex univerſo corpore lympham ſuam ad capſulam lumbarem & chyliferum ductum, in quem ſe oxonerant.

Cum omnia vaſa lymphatica revehunt lympham a circumferentia ad centrum, omnis autem regreſſus propter aſcenſum perpendicularem, præſertim ex partibus remotioribus contra naturam & valde difficilis eſt; hinc ſapientiſſimus opifex multa ordinavit adjumenta, quæ lymphæ progreſſum facilitant.

*Hoffm. Lib. 1. Sect. ii. c. iii. p. 57, 58.*

certainly

certainly is more incumbent on us to give fair warning, and to explain the future conſequences, that no blame be imputed to our conduct and management. As to thoſe caſes of greater importance, where the danger is evident, the friends of the patient will not be ſurprized if the worſt ſhould happen, being ſufficiently prepared for the event.

## *Of a* Fever, *from obſtructed Perſpiration.*

THERE is not perhaps in any ſcience a word or term of more general uſe, or extenſive ſignification than that of FEVER, as it occurs in medical writings. In reſpect to the original ſenſe and meaning of it, amongſt the antients, deſcribed by *Hippocrates*, by the word *Fire*, and explained by others, as denoting an increaſe of heat and velocity in the motion of the blood, the idea is ſimple and intelligible enough. But when we conſider the infinite variety of cauſes and effects thence produced, names, periods, and diſtinctions to be met with in authors, it would require many volumes to explain the theory of Fevers, or to give an epitome of the works of the antients only upon this comprehenſive ſubject. A ſyſtem of this nature far exceeds the limits of this little work, and the abilities of the author. To collect under one head all that is uſeful upon this occaſion, would be an undertaking worthy of the

the moſt able and experienced phyſician. To range only the names of thoſe who have treated of Fevers in chronological order, deduced from *Hippocrates* to the preſent time, would be no difficult taſk; and perhaps ſomething of this kind may be done in the courſe of this undertaking, interſperſed with a few remarks.*

Notwithſtanding the greateſt praiſe is due to human induſtry, employed in labours and reſearches, tending to promote the welfare of mankind; yet there are many voluminous writers from whoſe works the ſcience of healing hath not received advantages equal to the bulk of them. Before the circulation of the blood was known all phyſical ſyſtems muſt have been imperfect. Great capacity, extenſive learning, and indefatigable induſtry, were undoubtedly diſplayed in many antient performances, before *Harvey* appeared, and yet that grand diſcovery was want-

* *Gaſpar Bindonus*, in a work printed at *Venice*, in 1575, hath given an account of the antient writers upon Fevers, both Greeks, Arabians, and Latins, viz. *Hippocrates*, *Galenus*, *Paulus Ægineta*, *Alexander Trallianus*, *Ætius*, *Oribaſius*, *Nonius Medicus*, Greeks. *Avicenna*, *Razis*, *Abimeron Avenzoar*, *Averrois*, *Iſaac*, *Serapion*, *Haly Abbatis*, *Actuarius*, Arabians. *Corn. Celſus*, *Q. Serenus*, *Plinius Secundus*, *Gariopontus*, *Conſtantinus Africanus*, *Bernardinus Gordonius*, *Petrus de Abano*, *Arnaldus de Villanova*, *Philonius*, *Nicolaus Nicolus*, Latins.

The publiſher of this book, together with the names of the authors here mentioned, hath given a very uſeful compendium of their practice and opinions; and upon the whole it is a work of great merit.

ing

ing, and conſequently many of thoſe improvements never thought of, which have ſince been made, reflecting the greateſt honour on that noble invention, and its immortal author.

But although the advantages which the medical art hath received from *Harvey's* labours, are numerous and evident,* and many able men by purſuing the clue pointed out by that great genius, have more accurately examined, and more clearly explained the ſtructure and offices of ſeveral organs in the human body, (being animated by his example,†) yet we are far from arriving at

* A diligent peruſal of the works of *Harvey*, is indiſpenſably neceſſary for every young practitioner.

" † Dr. *Harvey* firſt publiſhed upon the motion of the " heart and blood, at *Francfort*, 1628; about which time, " *Aſelli* of *Milan*, alſo publiſhed his diſcovery of the lac- " teals in a dog. *Pecquet* of *Paris*, wrote on the receptacle " and duct of the chyle, in 1651, that had been deſcribed " before him by *Euſtachio*. *Bills* and *Joliff*, eſpied the lym- " phatic veſſels in 1650, which had been tranſiently ſeen " upon the liver before them, by *Aſelli*. *Wharton* in 1656, " *Steno* in 1662, and *Nuck* in 1690, dived into the glan- " dules in general. *Swammerdam* in 1664, and *De Graaf* " in 1668, examined the parts of Generation; *Harvey* in " 1651, *Needham* in 1666, *Hoboken* in 1669, and *Kerkring* " in 1670, the fœtus and its appertinents. *Gliſſon* illuſtra- " ted the liver in 1664; *Verſung* in 1643, and *De Graaf* in " 1664, the pancreas. *Ruyſch* in 1665, the ſpleen and " lymphatics. *Willis* in 1664, *Vieuſens* in 1685, and *Rid-* " *ley* in 1695, the brain and nerves, while *Ruyſch* went on " with the blood veſſels. *Willis* in 1673, and *Peyer* in " 1677, ſcrutinized the ſtomach and inteſtines. *Bellini* in " 1662, and *Malphigi* in 1666, the kidneys. *Borelli* and " *Lower* in 1669, the heart. *Highmore* in 1651, *Schneider*

at the ſummit of perfection in this ſcience. Theories in general have been ſpun too fine, ſyſtems have been multiplied too much, and ſome performances, tho' celebrated for ingenuity and elegance, have not been ſo ſatisfactory as we could wiſh, while others have failed anſwering the purpoſes of inſtruction on account of their tediouſneſs, and want of perſpicuity. Theſe errors future writers ſhould endeavour to avoid, by cultivating that ſimplicity which nature delights in; for in truth it may be ſaid, that the art of phyſic is in many caſes merely conjectural; few, very few definitions (in regard to Fevers, for inſtance) are ſufficient to give a juſt idea of the whole ſyſtem, at leaſt ſuch an idea as can be uſeful, or ſuch as our memories will be able to retain.

" in 1665, and *Cowper* in 1698, the inner nares, *Briggs*, " the eye in 1685; and *Duverney* in 1683, the organs of " hearing, &c. all which, with leſſer diſcoveries and obſer- " vations you will find worked up into ſyſtems of the laſt " age, although you will perceive a great many of thoſe " ſuppoſed new diſcoveries, already anticipated above an " age before, by the great prince of anatomiſts, *Euſtachio*."

*Haller's* Phyſiology, introd. p. 68, 69, 70.

From this numerous liſt it appears what infinite pains were beſtowed by the phyſicians and anatomiſts, living in the laſt century. They were undoubtedly animated by the ſpirit of emulation and enthuſiaſm, firſt excited by our great countryman's diſcovery, and ſo minute have been their enquiries and reſearches into every part of the human body, that little remains now to be further explained, or to be added to their labours, eſpecially after what Dr. *Hunter* hath made public at his lectures. To his fame, as an anatomiſt equal to any that has yet appeared, my teſtimony can be no addition.

Above all, an accurate knowledge of the human fabric, and a diligent obſervation of facts and caſes, are the ſureſt guides to excellence in this profeſſion, and to teach us rational methods of practice in the curing of all diſeaſes.

It is obſerved by ſome medical writers, *that before we can underſtand what a diſeaſe is, we ought to know in what perfect health conſiſts*; this poſition demonſtrates the uſefulneſs of cultivating the ſcience of anatomy in all its various branches, previous to our undertaking the cure of diſeaſes; and indeed every conſideration points out the abſolute neceſſity of obſerving this rule; for it muſt occur to every man who conſults his own ſafety, that the nature, cauſes, and ſymptoms of diſeaſes, the operation of medicines, and the intention with which they are preſcribed, can never be properly underſtood, unleſs by thoſe who have acquired a due knowledge of the ſtructure of that noble machine, upon which all medicines are deſigned to act: and not only the component parts or ſolids, but likewiſe the nature of the fluids, the laws of the circulation, the different ſecretions and excretions, with all particulars relative to, or depending upon them, muſt be made the objects of our attentive ſtudy, and a ſufficient progreſs made in theſe enquiries, before we preſume to meddle with diſeaſes. Thus we ſee into what an extenſive field the theory of fevers would lead us; a theory, which if taken in its utmoſt extent, would require us to explain every organ

and ſecretion, becauſe in fevers almoſt all of theſe are in ſome ſenſe or other affected. But this is a taſk too arduous for our preſent purpoſe, this we ſhall leave to anatomiſts, as belonging to their province, and contenting ourſelves with a few familiar obſervations, proceed afterwards to mention ſome facts, which may more fully illuſtrate our opinions.

We will firſt ſuppoſe a ſtate of perfect health. In this all the organs of the body are preſumed to be ſound, and to perform their offices without any obſtruction, the various ſecretions are carried on uninterrupted, the blood pure and unmixed with heterogeneous particles, flows in an equal gentle tide, and is propelled and returned by the arteries and veins, in that regular courſe ordained by and agreeable to nature; the reſpiration is free, the muſcles are pliable and active, the appetite is good, the ſleep refreſhing, and each fluid continues to circulate in its proper channel, and in that only. With this happy temperament of body the mind likewiſe concurs, and preſerves itſelf calm, ſerene, and compoſed, not agitated by any paſſion, nor too much engaged in any purſuit. By the mind we mean that active principle, or immortal intelligence, (call it what you pleaſe) which is intimately conjoined, and co-operates with the body, by means of its grand inſtrument the encephalon and the nerves thence ariſing. It mutually acts upon, and is actuated by the corporeal organs. And thus temperance and health in the body, and right reaſon and philoſophy

loſophy in the mind, together form the moſt perfect ſtate of human felicity to which we can poſſibly arrive; and to reſtore the diſeaſed conſtitution to this happy ſtate, is the higheſt degree of knowledge, and the greateſt honour to which a phyſician can aſpire.

This is the true definition of health, taken in its utmoſt latitude, and whatever diſturbs this ſyſtem conſtitutes a diſeaſe in its firſt principles. Whatever cauſe accelerates the motion of the blood, or increaſes the heat of it beyond the due medium, is properly ſpeaking, a *Fever*, or the *Fire*, ſo denominated by *Hippocrates*; an effect which may be produced from infinitely various cauſes, from ſome paſſion of the mind, from exceſs of muſcular motion, from intemperance and other errors in the non-naturals, and a thouſand different circumſtances too tedious to be here enumerated. Our anatomical knowledge, and the idea we may be ſuppoſed from thence to have entertained of the ſtate of perfect health, in the body and all its organs, will ſufficiently inſtruct us to account for theſe phænomena, otherwiſe unintelligible. For inſtance, when we find after ſevere exerciſe and fatigue, that a fever is excited with heat, thirſt, and pain in the bones; this we ſhall naturally ſuppoſe to ariſe in conſequence of the vaſcular texture of all parts in the body, even the bones themſelves being pervious; into the ſerous veſſels of which, the blood by the attrition of the muſcles is violently propelled, occaſioning the tender tubes to be too much diſtended, irritating the

the nervous extremities ſpread upon the perioſteum and other membranes, and thereby exciting inflammation and pain. This extreme is cured by its contrary: reſt relieves labour. But labour often repeated, and long continued, produces by the ſame cauſes, many inconveniencies which are more laſting: to theſe cauſes we may juſtly aſcribe the rheumatic pains, the rigidity and ſtiffneſs in the joints and limbs, more generally obſervable amongſt hard working people: becauſe the ſmaller veſſels becoming obſtructed, and the glandular lubricating juices ſecreted in the joints much waſted by labour, of courſe motion is impeded. And perhaps, on account of the greater reſiſtance which is made to the circulation and momentum of the blood from obſtructed canals, Fevers in theſe ſubjects prove more dangerous and obſtinate. Labourers indeed, poſſeſs more ſtrength and firmneſs in their fibres and veſſels, but leſs flexibility: on the contrary we find in delicate habits, that fevers (I mean *primi generis* from an increaſed velocity of the motion of the blood only, and not in nervous caſes) are cured with greater facility and expedition, becauſe the veſſels are more previous, and the fibres leſs rigid.

The primary principle then, or cauſe from which ſimple fevers are generated, appears to be owing to an increaſed motion, and conſequently heat in the blood;* this we ſee may be excited by

* This by forming obſtructions in the *minima vaſa*, ſeems to furniſh us with the moſt natural definition of a Fever, and nearly

by exerciſe, which, tho' very neceſſary for the preſervation of health, and for promoting the animal ſecretions, yet being proſecuted to an extreme, or too long continued, occaſions thoſe inconveniencies, which we have been ſpeaking of. But tho' man ſuffers in this reſpect by his labour, we ſhall find that he is infinitely more injured by his luxury. For an intemperate indulgence either in food or liquor, will certainly diſturb that even regular circulation, which we have deſcribed as the juſt criterion of health, and will be productive of dangerous conſequences, by creating a plethora, that deſtructive ſource of miſchief and diſeaſe to the conſtitution. This will be more clearly demonſtrated, if we obſerve, that even after a

nearly correſponds to the *Boerhavian* ſyſtem. *Hoffman's* doctrine of ſpaſms is not ſo conſonant to reaſon; he ſays, "Mihi itaque ad veritatem accommodate ſic definienda videtur *febris*: quod ſit *ſpaſmodica* univerſi ſyſtematis nervoſi & vaſculoſi *affectio*, juncta cum omnium in corpore functionum læſione, orta a cauſa *nervoſas partes ad intenſiorem contractionem irritante*, ita quidem, ut accedente ipſa, fluida vitalia primum ad interiora, cor & majora vaſa ab externo ambitu agantur, & poſtea, aucta cordis & arteriorum ſyſtole, celeriter cum æſtu per ſtrictiora vaſa iterum extrorſum pellantur, donec ſpaſmo laxato excretiones ſuccedant & febris deſinat."

*Hoffm.* tom. 2. par. 1. pag. 9.

I ſhould ſuppoſe that the effect of the nerves upon the arterial ſyſtem, in quickening the motion of the contained fluid, is not ſo often the cauſe of fevers as meer plethora, independant of the action of the encephalon. We well know that the mind cannot always command or ſuſpend the motion of the heart, which in general performs its ſyſtole and diaſtole, *ſua vi & arbitrio*.

temperate

temperate meal the circulation is conſiderably quickened, by the chyle being poured into the blood; for which reaſon the wiſdom of the antients delivered a caution againſt the uſe of exerciſe immediately after eating, becauſe from theſe two concurring circumſtances, the motion of the blood would be ſo much increaſed as to defeat the purpoſe of nutrition, and bring on many other inconveniences and diſeaſes. If therefore a temporary fever is produced in conſequence of moderate eating, tho' of the ſimpleſt food: what innumerable miſchiefs muſt ariſe from that luxury which diſgraces our modern tables? how many diſeaſes muſt unavoidably ſpring from the exceſſive uſe of fermented liquors? how much muſt the body be debilitated, not only by that ſcandalous indolence and effeminacy too frequently found amongſt the youth of theſe times, but that vitiated taſte, which inſtead of ſatisfying nature, is perpetually ſeeking for high-ſeaſoned dainties?

The number of thoſe who fall victims to luxury, who ſacrifice their time, their health, and themſelves to that foul idol, is incredible, is infinite: To deſcribe the variety of diſeaſes brought upon the human body from this cauſe, would be an endleſs taſk. I ſhall therefore only beg leave to quote ſome paſſages out of *Haller*, which will give a ſufficient idea of the conſequences of intemperance, even to thoſe who do not belong to the profeſſion of phyſic, and as this work may

happen

happen to fall into their hands, it is hoped that the note will not be unacceptable.*

Amongſt

* " A *Plethora* varies in its conſequent effects, according " to its quantity or degree, its extent or ſeat, and the time " it has continued. A chylous plethora ſoon breeds one " that is ſanguine, as that does one which is ſerous or lym- " phatic; and that by degrees unravels all orders of the " web-like or cellular ſtrata, ſurrounding the nerves and " the leaſt veſſels, with the whole compages of the viſcera. " The generative or productive cauſes may be reducible to " two heads: including (1.) thoſe which make more chyle " and blood than are neceſſary for the ſex, age, or occu- " pation; ſuch are a ſtrong ſtomach, bowels, and liver, " joined with coſtiveneſs; foods and drinks highly nouriſh- " ing taken too copiouſly or too often in the day; an effe- " minacy in the habit, make, or proportion of the body of " man, or thoſe which are natural to a woman, to which " add a ſanguine temperament, and a ſhort ſtature. (2) " Thoſe which diminiſh the circular motion, triture, and " expulſion of the blood and juices once formed: ſuch as " an effeminate weakneſs of the nervous, vaſcular, and " cellular ſyſtems; a rigid or ſenile inertia; a deficiency of " nervous juices, either in quantity or quality; a recluſe, " inactive, or ſedentary life; a careleſs diſpoſition of mind, " with too much indulgence of ſleep; or laſtly, any ac- " cuſtomary diſcharges too ſuddenly ſtopped, diminiſhed, " or neglected.

" The preceding cauſes may indeed accumulate too great " a quantity of good juices in the cellular ſyſtem and leaſt " veſſels, ſo as to produce a latent plethora, that may gra- " dually vitiate the whole habit, by a cachexia or caco- " chymia; but if this dormant fullneſs be too ſuddenly ex- " cited, or driven from the ſmaller veſſels and ſtagnant " cells, into the larger trunks, which have a much leſs " ratio of capacity than the capillaries; it will then be an " excited plethora, which may be ſuddenly fatal, by ex- " erting its violence on ſome of the important viſcera, if " not timely relieved by the lancet, with other evacuations " and revulſions. Such a fullneſs without artificial evacu-

Amongſt the many ill effects ariſing from a plethora, let me here mention a few circumſtances

" ations, can only be removed by exerciſe, gradually in-
" creaſed, with a ſubtraction from the diet, as thoſe well
" know who deal in fine horſes; having learned by expe-
" rience, the fatal effects of removing them ſuddenly from
" long reſt, to violent or ſwift labour, which if not pre-
" ſently fatal, ſeldom goes over without leaving *ſtaggers*,
" *bad wind*, or a conſumptive pining from injured bowels."

After enumerating the exciting cauſes of a plethora, our author proceeds to mention the effects of it, thus, " Let
" us then firſt endeavour to reckon up the effects of a dor-
" mant plethora, as near as we can, in the order they
" ſtand connected, or are productive one of another: ſuch
" are an impediment of the circulations, ſecretions, and
" excretions, throughout the whole habit: too great a di-
" ſtenſion and unravelling of the cellular fabric, leaſt veſ-
" ſels and nerves, wherever they are the moſt lax, and re-
" turn the leaſt action upon the fluids; thence a weakneſs
" in the contractile ſpring, or tone of the ſolids, and of
" their muſcular nervous force likewiſe. From thence the
" juices by degrees contract a cold viſcidity, thence ariſes
" a chilly leucophlegmatic habit, and a cold ſcurvy that
" may end in a fatal waſting or dropſy. From the ſaid
" cauſes enſue a ſtupidity of the mental, and a lazineſs of
" all the bodily faculties, with a perpetual inclination to
" dozing and ſleep: the ſkin appears livid, bloated, and
" oedematous; the pulſe is weak, ſlow and ſoft; the eyes
" ſwelled, watery, and red without heat, impatient of the
" leaſt cold wind, eſpecially upon firſt ariſing in a morning;
" the blood too poor, looſe, or ſerous, productive of an
" infinite variety of diſeaſes.

" The conſequent ſymptoms, ſigns, or effects of a dor-
" mant plethora, excited by any ſudden commotion of the
" nervous or arterial ſyſtems, are, (1) ſpeedy wearineſs,
" ſhort breathing, and a ſenſible throbbing of the arteries
" throughout the body, even from ſlight exerciſe, or paſ-
" ſions of the mind, or other motive cauſes. (2) A tur-
" geſcency,

ces, which daily obſervation brings before our eyes. I mean for inſtance ſuch as happen in thoſe

" geſcency of the veins and ſkin, with fluſhings of the " countenance. (3) A pulſe that is ſomewhat ſoft, but " large and full, and very labouring. (4) Erroneous " ſtrayings of the red or yellow parts of the blood, into the " ſmaller white veſſels and continuous ducts, which ought " to reſiſt and confine them within the ſanguineous ſyſtem: " [*thus we ſee the veſſels in the face give way, and become* " *filled with red particles, on account of the increaſed motion of* " *blood propelled from the carotids which are nearer the heart, and* " *conſequently more forcibly acting upon theſe parts*]. (5) An- " guiſh or oppreſſion in the viſcera that ſurround the heart, " and periodical pains chiefly about the head, back, ſides, " or joints, either rheumatic or hyſterical. (6) Morbid, " colliquative, and weakening diſcharges from ſlight ſpaſtic " commotions of the mind, exerciſes of the body, and " ſmall exceſſes in the non-naturals. (7) Continual fevers, " or local inflammations. (8) Lethargic, apoplectic, pa- " ralytic, convulſive, chronical, and nervous diſorders of " various kinds.

" In reſpect to the cure—the generating cauſes call for " correction by their contraries gradually introduced, and " as gradually abated, after the cure is confirmed; in which " lies one of the moſt important branches of ſkill in the art " of healing: but the exciting cauſes, to prevent ſudden " and fatal effects, require to be quelled immediately, by " blood-letting, cupping, lenient purging, and revulſions " from the important parts more immediately affected, by " bliſters, iſſues, clyſters, &c. let the ſleep and diet be " gradually leſſened, eſpecially in Summer, and the exer- " ciſes of body proportionably increaſed; only obſerve " here, that ſuch as cannot confine their appetite to a ſmall " quantity, i. e. to uſe aliments leſs nouriſhing, as are all " thoſe preſerved by ſalt, vinegar, ſpices, &c. the wines " dry, Florence, Old Hoc or Rheniſh, reduced by degrees " to a moderate quantity, and qualified with water, either " drank ſeparately or in commixture.

*Haller's* Phiſiolog. vol. 1. pag. 352, &c. *Paſſim.*

people, who drink too much of what is called *mild* malt liquor, eſpecially by taking it ſlowly into the ſtomach, and ſitting a long time over it, ſo that almoſt every drop of this glutinous compoſition, enters into the lacteal veſſels; in conſequence of which, a Plethora of the worſt kind is generated, manifeſting itſelf by a reduncancy of humours in all the glandular ſyſtems, by infarctions of the lungs, obſtruction in the liver, and other hypochondraical viſcera: in theſe caſes the cellular ſubſtance is too much increaſed and inflated, the breathing is rendered difficult, muſcular motion impeded, and the whole body ſoon loſes its activity and its gracefulneſs; for the unhappy followers of this cuſtom become bloated and dropſical, rendering their lives uſeleſs to ſociety, and burthenſome to themſelves. Beſides, the bad effects of this diſtempered habit will appear more alarming, if we conſider, that at a certain time of life, when animal growth ceaſes, there is a natural diſpoſition in the body to an increaſing fatneſs, which in itſelf will ſometimes be productive of diſeaſes, and therefore the inconveniences ariſing from it, are in every reſpect made worſe, if we add to this load by our intemperance, inſtead of diminiſhing it by exerciſe, that beſt preſervative of health.

Thus, for the ſake of inſtructing the juniors in the profeſſion, and for the amuſement of thoſe readers who do not belong to it, we have attempted to give a plain definition of a Fever, as an increaſe of heat, or of that equal circulation

of

of the blood and humours, in which perfect health conſiſts, as excited by things, which tho' in themſelves neceſſary to animal life (ſuch as bodily motion and food) yet if they exceed the due bounds of moderation, muſt inevitably prove injurious to the body: and again we have fully explained (from *Haller*) the nature of a plethora, as it is occaſioned by an intemperance in eating and drinking, and other indulgencies, and which proves ſo fruitful a ſource of diſeaſes. But beſides theſe cauſes, which are principally owing to our own miſconduct; there are many others entirely out of our power to controul, and which the moſt prudent care for our health cannot always enable us to ſhun: Amongſt theſe we are to conſider the temperament of air, ſometimes abounding with noxious particles: and another accidental circumſtance of great moment, happening frequently and unexpectedly, which is an obſtructed perſpiration, the conſequences of which we ſhall briefly relate.

But previous to our explaining the many miſchiefs which may ariſe from the perſpiration being obſtructed, it is neceſſary to obſerve the vaſt uſe and importance of this excretion, a ſubject already amply treated upon by medical writers, particularly *Sanctorius*, whoſe computation is, that it exceeds in quantity all others of the body put together. And that it is deſigned to carry off from the blood, many particles become uſeleſs, and even obnoxious, there is no reaſon to doubt. For the imperfect and periſhable ſtate of the human body,

is ſubjected to numberleſs inconveniences and neceſſities, which require various ſecretions and excretions, to be continually carried on in due proportion thro' tubes infinitely minute, the leaſt obſtruction * in which interrupts the animal functions, and proves deſtructive to health. Conſequently we find, that inſenſible perſpiration thro' the pores of the ſkin is of the utmoſt importance, and that whenever a check is given to it, a fever immediately ariſes, attended with ſymptoms, varying in different conſtitutions from a thouſand accidental circumſtances, which it is impoſſible fully to enumerate, every day producing freſh inſtances in practice.

Examples therefore would be endleſs; and in reſpect to the forms of preſcription, or to the aſſiſtance which regimen affords, every practitioner knows how to apply them, according as ſymptoms require.

On Feb. 23,—A young lady about 25 years of age, complained of ſhiverings, pains in the limbs, and afterwards heat and thirſt; her eyes looked heavy, her pulſe was quick, her voice al-

* Thus we obſerve in old age, that the pores of the ſkin become almoſt impervious, and the juices being confined occaſion that frequent itching, to which people in that ſtage of life are ſubject. " That the uſeleſs juices are not " ſufficiently carried off in old age, ſays Dr. *Mead*, mani- " feſtly appears from the diſſections of the bodies of very " old people; the inſides of their arteries being ſometimes " found oſſified here and there, whereby they had almoſt " entirely loſt their ſpringineſs: and the orifices of the na- " tural ducts are often obſerved to be quite cartilaginous."

*Mead's* works, 4to. p. 460.

Vid. *Heſſin.* tom. 3. ſect. 1. cap. viii.

tered

tered in conſequence of the *Schneiderian* * membrane being affected, and her face was alternately pale and fluſhed: the catamenia had appeared in due quantity about a week before; there was nothing remarkable in reſpect to ſtools or urine, but her ſkin was rather hot and dry, and her tongue furred. She had caught cold by indiſcreetly expoſing herſelf to the evening air. As there was no ſickneſs at the ſtomach, the firſt intention of cure was to excite perſpiration; for which the following mixture was ordered, and plentiful dilution enjoined, with balm tea, weak wine wey, and other ſmall liquors warm.

℞ Spir. Minderer. Aq. Menth. Pip. aa ℥iß. Alex. Simp. ℥iv Pulv. Febrif. Specif. ʒſs; Syr. Balſam ℥i m. ſumat cochl. iii, 4ta vel 6ta quaquâ horâ.

The *Pulv. Febrif. Specif.* hath already been recommended,† and is on every account preferable to the *Pulv. contr. comp.* or the *Pulv. Bezoard.* or indeed any other of thoſe ſuppoſed febrifuges, becauſe it certainly promotes perſpiration more effectually, by gently irritating the ſtomach; and with this peculiar advantage, that if there is any

" * Nimirum quando ex conclavi valde calefacto, vel ex " lecto calido, in auram frigidiorem ſubito concedimus, " horrore corpus e veſtigio corripitur, & *ſuppreſſa perſpira-* " *tione*, materia acris excrementitia in interiora maximeq; " glanduloſas tunicas faucium, oris, narium, & bronchio- " rum vergens, tuſſim, coryzam, defluxiones, & febres ca- " tarrhales conciliat."

*Hoffm.* tom. 3. ſect. 1. cap. viii. p. 335.

† Vid. p. 72.

bile

bile or offenſive matter in the firſt paſſages, it is ſure to be diſcharged in conſequence of the ſlight ſickneſs occaſioned by the *Tart. Emet.* the patient being forewarned of its effect, and encouraged to drink *Carduus* or *Camomile* tea, to aſſiſt the operation. Sometimes the irritation from the *Tart. Emet.* extends to the inteſtinal tube, and produces a ſtool or two, which proves equally ſalutary with the other both happening juſt as nature herſelf means to give relief. In this preſent caſe, however the operation was by ſweat. It muſt here be obſerved, that a warm *pediluvium* * was ordered at night, which ought to be a conſtant practice in fevers, and which is juſtly recommended by eminent phyſicians, as many advantages are derived from it, eſpecially when uſed at the firſt acceſs of heat, generally coming on towards evening.

Feb. 24, the patient complained of a pain in the ſide, to remedy which, twelve ounces of blood were taken away; this appeared to be in a ſizy ſtate; the fever however was not increaſed, and as the mixture preſcribed agreed well, ſhe continued the uſe of it at proper intervals. Towards

* "Licet autem pediluvia tantum infimis & extremis corporibus admoveantur, eorum tamen virtus longe lateque ſe diffundit & graves in remotis etiam partibus morbos levat. Dum enim humore illo calido foventur pedes, nervoſæ, tendinoſæ, ac muſculoſæ in iis fibræ ex quibus intercurrentibus vaſis coagmentati ſunt, laxantur, remittuntur, pori & tubuli antea conſtricti ampliantur, & impetus ſanguinis ad inferiore derivetur, &c.

*Hoffm.* tom. 3. ſect. 11. cap. 10.

night

night the pediluvium was ordered again, and a gentle anodyne given at bed-time.

Feb. 25, After a tolerable good night, the patient was apparently better this morning, tho' the urine was ſtill ſomewhat high coloured and without ſediment; towards evening a febrile heat, and reſtleſsneſs came on, with pain in the head and bones, and likewiſe in the ſide, the reſpiration was rather laborious, and the pulſe fuller than it was the day before: for theſe reaſons bleeding to the quantity of twelve ounces was repeated, and the following draughts were preſcribed, enjoining the patient to keep altogether in bed, and to dilute plentifully.

℞ Sal. Abſinth. ℈i. Succ. Limon. Aq. Menth. pip. aa ℥ß. Alex. ſimp. ℥i. Pulv. Febr. Specif. gr. vii. Tinct. Thebaic. gt. vi Syr. Balſam. ℥iß. m. f. Hauſt. 4ta quaq. horâ ſumend. Mitt. iii.

Feb. 26, the Patient enjoyed a comfortable night, having taken all the draughts: ſhe was deſired ſtill to keep her bed and to continue in the uſe of her medicines. She lay in a kind, breathing ſweat, her pains ceaſed, her head was quite clear, and her voice came to its natural tone, the urine too began to depoſit a ſediment, and every ſymptom appeared favourable. This day ſhe took three more draughts.

Feb. 27, Having had no ſtool during the three laſt days, and the quantity of urine ſecreted, not being ſufficiently copious, the patient complained

rather of a fullneſs in the abdomen, and a ſlight irritation in the bladder.

℞ Decoct. commun. pro Clyſter. ℥xii,
Ol. Olivar. ℥iii
Sal. Cathart. amar. ℥ß Tinct. Sen. ℥i
m. f. Enema h. x^ma matutin. injiciend. & veſperi repetatur ſi non prius ſeſe dejecerit alvus.

The firſt glyſter operating very well, the patient felt immediate relief. But towards evening complaining of lowneſs, ſome cordial volatile draughts were ſubſtituted in the room of the others, one of which at night was made anodyne with tinct. thebaic. gt. xvi. The fever now became intermittent and was very ſlight.

Feb. 28, Previous to the adminiſtration of the *Cortex Peruv.* the body was kept open by means of the following mixture.

℞ Fol. Sen. ℥iii, Tart. Solub. ℥iß Tamarind. ℥ß coq. in Aq. Font. q∫. ad ℥vii Colat add. Tinct. Sen. Syr. Roſar. Solutiv. aa ℥ß Sp. Lavend. c. ℥iß m. f. Mixt. cujus cap. Cochl. iv pro re nata donec alvus ſatis fuerit ſoluta.

Mar. 1, She began to take the *Decoct. Cort. Peruv.* and was deſired to continue in the uſe of it for three or four days, and ſhe ſoon recovered perfect health. It may be proper juſt to obſerve, that the catamenia the firſt time they appeared after her illneſs, were deficient in quantity, for which reaſon the women expected that ſome medicines proper for that ſuppreſſion ſhould be ordered; but they were ſoon convinced, that whatever

ever contributed to recruit the patient's ſtrength, was the only *emmenagogue* wanted.

I have ventured to particularize this caſe, however common and unimportant it may appear, for the ſake of introducing a few obſervations calculated for the uſe of younger practitioners, whoſe inſtruction I principally aim at.

We find it neceſſary in the treatment of all diſeaſes, to attend even to the minuteſt circumſtances, that we may be able to diſcern what nature herſelf wiſhes to have done, and what efforts ſhe makes for her own relief and preſervation. Theſe we are to aſſiſt by ſuch means and medicines, whoſe operation correſponds the neareſt to her intention. Thus in the firſt attack of fevers, wherein the plethora is manifeſt, bleeding is by the univerſal conſent of phyſicians always preſcribed, and muſt be repeated at due intervals, when ſymptoms require it; the free uſe of the lancet being juſtly deemed one of our greateſt modern improvements. Indeed we may obſerve of this evacuation, that whenever it is proper, a cure is frequently effected by it, independent of any other remedy; and wherever it is abſolutely neceſſary, no other remedy can ſerve as a ſubſtitute. In doubtful points when the indications and ſymptoms are equivocal, or when we have ſome reaſon to ſuſpect a putrid diſpoſition lurking in the habit, under appearances at firſt view inflammatory; there is a very ſafe method of deciding our conduct, which is this: Let a vein be opened, and one ounce of blood taken away, then ſtop the orifice

for a while, till the ſtate of that blood is carefully examined; the appearance will ſoon determine the propriety of the operation, and point out the quantity neceſſary to be drawn off: if the blood is ſizy, the loſs of ten or twelve ounces will ſurely do good, but if it is not, the loſs of only one ounce cannot poſſibly do harm; and by obſerving this caution * the patient will always have an opinion of your conduct and judgment.

In ſickneſs of the ſtomach a vomit will always be ſerviceable, for it not only relieves in that intention, but often proves uſefully purgative alſo. The ſame end is anſwered in very ſlight caſes by the *Tart. Emet.* in the *Pulv. Febr. ſpecif.* as before obſerved: but if it is proper that the inteſtines ſhould be unloaded, more eſpecially if there is any fullneſs or uneaſy ſenſation in the *abdomen*, glyſters † are indiſpenſably neceſſary, and cannot be

* In gouty caſes I have frequently taken this method in order to obviate thoſe objections, and remove thoſe prejudices which prevail againſt bleeding, and have convinced the patient and his friends how neceſſary this evacuation is in ſeveral circumſtances of the gout, from the ſizy appearance of the blood, and from the relief obtained in conſequence of the operation. In plethoric habits, when the cauſe itſelf is inflammatory, when the artery is tenſe and the pulſe high, no reaſonable man will doubt the propriety of bleeding, or be deterred from uſing ſo obvious a remedy, merely becauſe under the name of *Gout*, cuſtom and opinion hath in general forbid it. I have known many perſons unhappily ſuffer by this abſurd prejudice, hindering the practitioner from exerciſing his own reaſon.

† Habent hæc multum cum balneis affine atque commune. Balnea quippe lavacra ſunt partium externarum, clyſteres

be too ſtrongly recommended, notwithſtanding the patient and the attendants are often averſe to their uſe, on account of ſome little trouble in the adminiſtration of them.

Thus by attending carefully to the firſt intentions of cure, which conſiſt chiefly in making proper evacuations, half the buſineſs will be done; and in reſpect to mere medicine, that immenſe and formidable apparatus (with which heretofore the chambers of the ſick were crowded) hath long been exploded by phyſicians, and more ſimple and efficacious forms brought into uſe: in particular the *dietetic* part of phyſic, hath been cultivated with more care and with more ſucceſs of late, in proportion as the numerous claſſes of febrifuges, introduced by ſuperſtitious credulity, have been diſregarded and left out of practice. But tho' I condemn all unneceſſary parade, yet I muſt obſerve that there is a regard due to human weakneſs, which in a ſtate of diſeaſe and diſtreſs looks for, and expects aſſiſtance from medicine; and therefore it is proper, in order to raiſe the ſpirits of the patient, and to gratify his expectation, to give him at ſtated hours ſuch medicines as are applicable to his diſeaſe, for we generally find, that he hath an opinion of receiving

clyſteres vero inteſtinorum,—ita etiam enematum operatio non ſolum in ſanguinis & humorum circuitum, ex immutatione pulſus, ſed etiam ad excretiones movendas, præter alvi ſubductionem, ex *perſpirationis* & urinæ uberiori ſucceſſu, luculenter patet.

*Hoffm.* tom. 3. ſect. 2. cap. 10.

benefit

benefit from what is preſcribed by the phyſician, and it would be cruel to deprive him of hope, which frequently ſupports him, even beyond our own expectations. Beſides the mind is often depreſſed and incapable of ſtruggling under many infirmities, unleſs aſſiſted by ſuch medicinal aids as it relies upon, and expects relief from.

But to proceed. From the ſucceſs of our modern inoculators, ſome have recommended the uſe of *cold water*, as a ſpecific in fevers; but I cannot from any experience of my own, enlarge much in favour of it, eſpecially in fevers ariſing from obſtructed perſpiration; becauſe I have found warm diluents anſwer exceeding well; and when common practice proves ſucceſsful, it is not quite ſafe to depart from ſo uſeful a guide. Beſides, I think there is a very material diſtinction to be made in the treatment of fevers, between thoſe which are produced from internal cauſes, when nature exerts all her efforts to expel ſomething hurtful to her, and thoſe artificially excited, by infuſing into the lymphatic ſyſtem poiſonous particles, which are intended to be mixed with the blood, in a certain degree only. For in theſe laſt caſes it is undoubtedly right to extinguiſh, or rather to prevent heat by means of its grand oppoſite; and this is now done with ſucceſs by almoſt every practitioner in the Kingdom. But in the other inſtances, in critical fevers from internal cauſes, nature acts upon different principles, requiring ſuch aſſiſtance (from moderate warmth, and medicines calculated to excite perſpiration)

as

as corresponds with her own operations: for experience hath shewn that too sudden a check given to the heat of the blood, hath likewise stopped or retarded the motion of it, to the imminent danger of the patient. Therefore the utmost caution is requisite to distinguish accurately in what species of fever or heat *cold water* can be given with safety or advantage, that we may not be induced too implicitly to follow popular doctrines, advanced perhaps by caprice, which will be exploded after a little time, by reason and experience.*

It is here necessary to mention something in regard to the administration of opiates in fevers, as in the case lately described, the reader will find that anodynes were given previous to the crisis of the fever: I have from experience manifest proofs of their beneficial effects, even in the first access of the disease, notwithstanding *Sydenham* forbids giving them till the declension. From his opinion it is rather dangerous to differ, but however I must needs declare from my own practice, that facts will sufficiently justify what is here recommended, tho' it seems contrary to so great an authority. I have observed in variety of cases, that when the pain in the bones is severe, in consequence of the nervous *papillæ* being irritated from the violent distension of the sanguiferous

* *Hoffman* hath wrote two chapters upon cold water, vid. tom. 2. part 2. cap. x. *De frigido potu vitæ & sanitati hominum, inimicissimo.* And again, tom. 3. sect. 2. cap. xi. *De aquæ frigidæ potu salutari.* In these the reader will find the whole matter fully explained.

tubes;

tubes opiates are of the greateſt ſervice, proper evacuations being premiſed: but then we muſt not ſtop at one doſe, or be deterred by ſome few uneaſy ſenſations, which may poſſibly occur at the firſt taking of them. I have known that a ſmall doſe of *Tinct. Thebaic.* inſtead of anſwering any uſeful purpoſe, hath excited a kind of teazing delirium and reſtleſſneſs, which hath brought the medicine into diſcredit, both with the patient and the preſcriber: but if the doſe had been repeated at proper intervals, or increaſed in its quantity, then the moſt happy ſucceſs would have attended the uſe of it.

One obſervation had almoſt eſcaped me, which I beg leave (however abruptly) to mention in this place. Much hath been ſaid concerning the effects of the mind upon human diſeaſes: it appears to me that the mind, inſtead of aſſiſting us under bodily afflictions, rather increaſes them. Men, who in a ſtate of health are capable of forming and conducting the greateſt and boldeſt enterpriſes, become children under a diſeaſe; and thoſe who have braved death with the moſt ſignal intrepidity in the field, ſhrink with horror at the leaſt apprehenſion of its approach to them in the bed. This circumſtance exhibits a melancholly proof of the inſufficiency and futility of any excellence that can be poſſeſſed by MAN, ſince we find that courage, a quality eminently uſeful, and univerſally admired, cannot exempt us from thoſe alarms, fears, and feelings, inſeparable from our nature, when the body is attacked by diſeaſe,

or when it declines by age. What then ſhall we ſay to a paſſage in Dr. *Mead's* works, wherein he ſeems to ſpeak of the power of the mind as predominant, not on y over the vital motions of the body, but likewiſe as an aſſiſtant againſt its diſeaſes? "But this power of the mind (ſaith he) "is moſt remarkably perceptible in thoſe fevers, "which are called peſtilential. For in theſe one "may obſerve, that the mind hurries to the aſ- "ſiſtance of the labouring frame, fights againſt "the enemy, and, with the aid of the animal "ſpirits, excites new motions in the body, "(though we may be inſenſible of it) in order to "expel the poiſon which is blended with the hu- "mours, through every outlet. And hence very "great phyſicians have defined a diſeaſe to be a "ſtruggle of NATURE,* in defence of the health "of the individual."† But is not this obſervation contradicted by facts? inſtead of *hurrying to the aſſiſtance of the labouring frame*, do we not in general ſee that the mind is too much diſturbed and depreſſed when the body ſuffers, to be capable of fighting againſt the enemy? nay it is often the very cauſe of diſeaſes, or at leaſt by raiſing fears and perplexities, keeps us longer under them, than otherwiſe we ſhould be. In fine, we may obſerve, that thoſe people whoſe mental faculties are the ſtrongeſt, or whoſe minds are too ſenſible, and too much engaged in thinking on

* Nature I allow will ſtruggle, but I think in this caſe the term is not ſynonimous with the MIND.

† *Mead's* works, quart. Edit. p. 457.

the diſeaſes which oppreſs the body, receive no ſort of benefit by this means, but generally diſtreſs themſelves more, and ſometimes become the unhappy inſtruments of their own diſſolution.*

I ſhall now conclude this article, which the reader will perceive is not adequate to a full deſcription of the method of cure in ſimple fevers: but however defective and irregular it appears, ſome uſeful inferences may probably be drawn from it. As to the various exacerbations in fevers, terminating in dangerous and fatal ſymptoms, when the encephalon or the membranes of the brain are affected, together with the long train of conſequences thence to be deduced, theſe ſubjects would lead us into a field too extenſive for the limits of this work, or the abilities of the author.

* I beg leave to obſerve in reſpect to the intimate connexion between the body and the mind, and the various diſeaſes of each, that, whatever accelerates the motion of the blood conſtitutes a *Fever* in its firſt principles; and whatever paſſion affects or agitates the mind too much, borders upon *inſanity*. Such is the neceſſity of preſerving a due medium both in the circulation, and in the operations of the encephalon, that without this equipoiſe health or reaſon cannot be ſaid to ſubſiſt.

*Fatal*

## *Fatal Effects from a Schirrosity of the Prostate Gland,* and the Bladder.*

AMONGST the many examples of human misery, none have appeared to me more shocking than the case of the unhappy object whose history I am now going to relate. This patient did not come under my care till the disease was very far advanced: When first I saw him he was about sixteen years of age, and had long laboured under a suppression of urine, attended with the most violent and continual pain and irritation at the neck of the bladder. The small quantity of Urine which was voided, appeared almost always to be mixed with matter: the penis (especially the glans) was inflamed and swelled, in consequence of the patient perpetually handling and rubbing it; two or three fistulous orifices were formed in perinæo; and every symptom plainly indicated that the urinary passage and all its appendages were schirrous, contracted, and in some places ulcerated. The cries of this miserable wretch, who was almost perpetually straining his body and varying his position, disturbed all those who were in the same house or ward with him, for he seldom enjoyed any intervals of ease. At first it was suspected that there might be a stone in the bladder, and consequently the *sound* was passed at

* I speak of this glandular substance in the singular number, as it surrounds the neck of the bladder and acts uniformly, though anatomists divide it into two glands, and say the prostates.

different times with much difficulty, but no ſtone was diſcovered. Every method that could poſſibly be thought of was tried for his relief, but none ſucceeded. *Bougies* now and then were ſerviceable, but frequently occaſioned ſuch increaſe of pain and irritation, that the patient would not ſuffer them to be introduced. He was put under the care of one of the moſt eminent Hoſpital-Surgeons in England, who did all that man could do in the caſe, but without effect, and he was diſcharged as incurable. It would be tedious to give an exact recital of the ſufferings of this unfortunate youth, during the ſpace of ſeven or eight years, the ſymptoms night and day ſcarce ever remitting or varying; even when he could procure ſome little reſpite and ſleep, by taking opium largely (his laſt reſource) he quickly waked with horror, to undergo freſh agonies. At length in the year 1765, death, which he had ſo long and earneſtly wiſhed for, put a period to his miſery.

Upon opening the body, I was firſt ſtruck with the appearance of the *ureters*, which, had not their ſituation been obvious, might have been eaſily miſtaken for ſome portion of the inteſtines; ſo nearly did they reſemble them in their ſize and tortuous ſhape. It is difficult to conceive an idea how much they were diſtended, and I lamented the want of ſome ſkilful artiſt, who might have exactly delineated a view of all the parts as they appeared. Theſe tubes contained a very large quantity of fœtid water, mixed with matter; and indeed they had been for a long time the only reſervoir

ſervoir for the urine: the internal ſurfaces of them were ulcerated in various places. The kidneys were much diſeaſed, and the tubuli urinarii amazingly large, owing to the ſecreted urine being long retained in them, becauſe of the ſtrong reſiſtance and narrow cavity of the bladder. The *pelves* in both kidneys were filled with large ſtones, ſhaped exactly to their cavity; theſe ſtones were probably formed, not ſo much from any original defect in the ſecreting organs, or any particular tendency in the ſecreted urine, as from the long retention of that fluid, which conſequently would become more liable thus ſtagnating to concrete and form into *calculi*. In every cavity containing theſe ſmall ſtones, matter likewiſe was found.

The bladder was ſchirrous, contracted, inflamed, and in ſeveral parts of it ſuppurated; theſe appearances exceeded any degree of diſeaſe, that I ever met with in this organ. It muſt have been undoubtedly for a long time incapable of receiving urine, owing to the inflammation on its internal ſurface, which rendered it ſo exceedingly irritable as not to endure the urine however ſlowly oozing from the ureters: conſequently in ſuch a ſtate no operation could have been of the leaſt ſervice. And again, as the diſeaſe from the bladder, by conſent and contiguity of parts, gradually affected the urethra alſo, it is doubtful to me whether *Bougies* could poſſibly remedy an obſtruction, ariſing from cauſes ſo dangerous, and ſo remote from their immediate action. It may perhaps appear ſingular, and even abſurd to call

in

in queſtion the efficacy of *Bougies*, in obſtructions of the urinary paſſages; but I muſt confeſs that I am far from being ſanguine in favour of thoſe remedies, eſpecially in caſes wherein the *proſtate and bladder* are diſeaſed; nay, I am ſuſpicious that they are improper, and even dangerous, becauſe they certainly irritate too much, and frequently bring on thoſe very diſorders which they are deſigned to remove. I know very well how prevalent the ideas are, of forcing thro' obſtructions, levelling inequalities and excreſcencies, and enlarging the narrow canal of the urethra to its proper diameter, by means of medicated candles, nicely prepared and judiciouſly adapted in different ſizes, to different circumſtances and degrees of obſtruction. *Daran* hath acquired much reputation in this branch of practice, and undoubtedly poſſeſſes great ſkill, from his long experience in thoſe caſes wherein *bougies* are uſed, and likewiſe an eminent dexterity in the application of them; and in conſequence of theſe advantages he muſt in many reſpects have proved ſucceſsful. But in ſome inſtances, great injury muſt unavoidably be done to the tender paſſage of the urethra, and to the bladder itſelf, by forcibly introducing *bougies*, becauſe the irritation and pain thence produced will certainly throw the bladder into ſpaſms, than which nothing can be more pernicious. Every thing which excites a *ſtimulus* occaſions likewiſe a contraction, which being too often repeated, will in time greatly affect the texture of this organ: even in the natural courſe of the ſecretion of urine,

the

the ſame pernicious effects may happen from abuſe and debauches in drinking; how much more miſchief then muſt the bladder and the urethra ſuſtain by a foreign ſubſtance, introduced *contra naturam?* Will any man ſay there is any *ſpecific* virtue in the compoſition of the *Bougie?* I ſuppoſe there is none. Will any man deny that there muſt be a very conſiderable irritation produced, in conſequence of uſing the *bougie?* experience tells us that *bougies* always irritate. So that it appears to me upon the whole, that the ſuppoſed advantages ariſing from the uſe of *bougies*, are ſcarcely equivalent to the inconveniences brought on by them; and that ſchirrous bladders and urethra's are more frequently *occaſioned* than *cured*, by theſe celebrated remedies.

Some have recommended them in caſes of ſwelled teſticles, and upon this principle: they ſuppoſe that by exciting irritation and inflammation in the urethra, a diſcharge from the glands in that canal may be brought on; to the ſuppreſſion of which diſcharge in Gonorrhea's, they attribute the *Hernia Humoralis*, as it is called. I have uſed *bougies* with this intention formerly, but without any ſucceſs: and indeed I have no idea of curing a diſeaſe occaſioned by a tranſlation of matter into one organ, by exciting a diſeaſe in another. The ſymptoms in each caſe are diſtinct: When the urethra is inflamed, bleeding, opening medicines, and cooling diluents are proper; when the teſticle is affected, ſuſpenſion, reſt, bleeding likewiſe, and emollient applications are neceſſary, ſo that each

each diſeaſe ſhould be treated independant of any ſuppoſed relation between them. We muſt not inflame the urethra, to leſſen the ſwelled teſticle, nor muſt we repell too ſuddenly the humour diſcharged, either into the teſticle or inguinal glands, with a view of relieving the urethra.

But let us return from this digreſſion, and proceed to explain the other appearances, in the caſe now under conſideration. The *proſtate gland* was greatly enlarged and ſchirrous, the *Caput Gallinaginis* remarkably ſo, and the *veſiculæ ſeminales*, ſcarcely diſtinguiſhable;* the canal of the urethra all along was indurated and contracted, and near the *proſtate gland* totally impervious: there were ſeveral fiſtulous orifices in perinæo, ſurrounded with much callous ſubſtance, thro' which the urine had been forced by the violent contraction of the bladder, winding its way very irregularly in the cellular membrane, and at length burſting thro' the external ſkin.

This was the ſtate of the diſeaſed parts (for all the other viſcera, both in the *Thorax* and *Abdomen* were entirely ſound) ſufficiently demonſtrating the nature of the patient's malady and ſufferings. As to the primary cauſe, it proceeded from a ſcrophulous humour, inherent in his conſtitution, and in the reſt of his family: at leaſt this is the moſt probable ſuppoſition, becauſe he was too young to acquire any venereal infection, at the time his

* This ſufficiently explains the reaſon why a diſeaſed *proſtate*, in conſequence of frequent or ill treated claps, muſt injure the generative faculty.

diſorder

diſorder firſt appeared. We well know how terribly the glandular ſyſtem is infeſted by the *ſcrophula*, and the *proſtate* is as liable perhaps to it, or any other gland; tho' a ſtrumous enlargement of this particular gland is attended with more dangerous conſequences, on account of its ſituation, commanding the neck of the bladder; and more eſpecially, the effects of diſeaſe here become troubleſome in male ſubjects, becauſe their urinary paſſages are narrower, more liable to be obſtructed, and expoſed to many inconveniences, from which the ſofter ſex is exempted, by having a ſhorter and wider *urethra*.

I muſt here obſerve, tho' with much concern, that there are many inſtances occurring in practice, which prove the inefficacy of *Bougies*, and of the *Catheter* in diſeaſes of the *Proſtate Gland*, and in ſuppreſſions of urine. A fatal caſe of this nature happened not long ſince, in which all poſſible means were made uſe of, before it came to an extremity: the cauſe of the patient's malady was owing to venereal infection, which by repeated claps had rendered the *proſtate gland* and the bladder itſelf ſchirrous. I am afraid that theſe organs, in conſequence of ſome abuſes will now and then acquire ſuch a degree of calloſity, (which affects the urethra alſo) that there can be no poſſibility of remedying. In the caſe I am now relating, the unhappy ſufferer was frequently ſubject to ſuppreſſion of urine; in ſome paroxyſms of which, the *bougie* and the *catheter* afforded relief, but in the laſt it was impracticable to intro-

duce either; the parts became mortified, and the patient of courſe died, after he had endured the moſt terrible agonies. I ſaw a letter from an eminent practitioner, whoſe veracity I can depend upon, tho' I have no right to uſe his name, in which he mentions the caſe of a man, periſhing by the unſkilfullneſs of his ſurgeon, who, in attempting to introduce the *catheter*, exerted ſuch violence that the inſtrument actually penetrated into the *rectum*. Hence we may give a caution againſt the haſty uſe of inſtruments, which are often recommended upon erroneous principles, and which, in ſome circumſtances of inflammation, and diſeaſe in the *proſtate* and *bladder*, cannot poſſibly anſwer any good purpoſe.

I ſhould conclude this article with more ſatisfaction after thus deſcribing the nature and the cauſe of a diſeaſe in the *proſtate*, if I was able likewiſe to ſay more in reſpect to the *modus medendi*. The examination of dead bodies proves defective in its uſe, unleſs by inveſtigating the cauſes of diſeaſes in them, ſome method of cure could be pointed out, applicable to ſimilar exigencies in other ſubjects. In the particular diſſection which I now have been treating upon, I own myſelf at a loſs how to make any uſeful inference: it affords only a melancholy proof of the inability of human ſkill to remedy theſe infirmities. Suppoſing the ſtate of the parts had been known accurately, and even early in the caſe, could any medicine have been uſed with ſucceſs? Would any rule of diet have availed? Would mercurial unction?

unction? Would the bougie? theſe and many other queries which might be ſtarted upon this occaſion, I muſt leave to the diſcuſſion of more able practitioners, and ſhould be glad to know their ſentiments upon the ſubject.

## *An unſucceſsful* Amputation.

IT hath been obſerved that the hiſtory of phyſic would receive great advantages from a true relation of our ill ſucceſs, and our miſtakes in practice; for which reaſon I ſhall without heſitation or reſerve deſcribe the following caſe:

On *May* 20, 1766, *B. D.* a man aged about 34, falling from a Coach-box, his leg was caught between the ſpokes of a wheel then in rapid motion; by which accident the foot was twiſted half round, the lower end of the *tibia* fractured and diſlocated from the *aſtragalus*, the ſibula likewiſe broke nearly at a paralel place, the tendons being much lacerated, the extremities of the bones puſhed thro' the ſkin, with a conſiderable hæmorrhage iſſuing from the divided blood veſſels. Under theſe circumſtances I found the patient, and after conſidering the whole of the caſe with the utmoſt attention, I judged it abſolutely expedient to amputate the leg. The patient was extremely low, and it was with great difficulty that we perſwaded him to ſubmit to thoſe meaſures which his unhappy ſituation rendered neceſſary. In this ſtate of mind I knew

the chances of ſucceſs were againſt him, and therefore I took care to have a proper aſſiſtant and conſultation, and to deliver to his friends a doubtful prognoſtic. The operation was not attended with any particular circumſtances in itſelf: great care was taken to draw up the muſcles, and to ſaw off the bones as high as poſſible, this being the beſt method to make a good ſtump: but the patient from his irritable habit complained exceſſively of pain, therefore proper doſes of opiates were ordered, ſome blood was taken from the arm, a glyſter next day injected, and all poſſible means uſed to keep him quiet and eaſy. The wound was dreſſed the fourth day, very carefully avoiding force in removing the doſſils, and lint dipped in warm oil was applied over the whole ſurface, a fomentation uſed, and the ſtump afterwards rolled up very gently. Two circumſtances occurred in a few days, both of them unfavourable; the one, an uncommon protruſion of the fleſhy fibres of the muſcles, and rather of a cancerous appearance; the other, a thin, ichorous and fœtid diſcharge. Add to theſe a continual lancinating pain and ſhooting as it were, which deprived the patient of reſt, and at length (as we ſhall find by and by) of reaſon.

In reſpect to the phyſical treatment of this caſe it conſiſted chiefly in duly obſerving the diet and regimen, the neceſſary evacutions, and in giving the *Cort. Peruv.* as ſoon as poſſible, hoping by that means to correct the accrimonious diſcharge; anodynes likewiſe were adminiſtered in proportion as the pain was violent, tho' perhaps not ſo freely

as

as future experience would now juſtify. But by no exhortations or arguments could we quell that uncommon perturbation of mind under which he perpetually laboured: and beſides we had another difficulty to ſtruggle againſt, which aroſe from a diſorder in his ſtomach and the œſophagus, inſomuch that he was ſcarcely able to ſwallow, or to keep any thing upon his ſtomach. Theſe ſymptoms (whether ſpaſmodic or not) were very alarming, as they plainly ſhewed the habit of the body to be exceeding bad, from which cauſe the diſcharge in the wound became ill-conditioned, and the abſorption in all probability excited thoſe complaints in the capital organs juſt now mentioned. Mean time, the dreſſings and applications were of the mildeſt kind to avoid irritation; but all our endeavours proved ineffectual, his pain became inſupportable, and his mind quite deſperate, inſomuch that he made two attempts to deſtroy himſelf; in the laſt of which he had almoſt ſucceeded by means of a garter which he concealed, and with which he was found nearly ſtrangled, and it was with difficulty that he was brought to himſelf. The ſymptoms ſtill became worſe, and the patient died on the ſixteenth day after the operation.

Upon conſidering with the utmoſt attention all the circumſtances which occurred in this caſe, I am inclined to think that a *cancerous* habit was the cauſe that rendered it unfortunate: probably this diſpoſition might lie dormant for a long time, and yet manifeſt itſelf upon this accidental occaſion, the humour then being rouſed, and immediate flying to the wound. The conſtant lancinating pain ſeems to corroborate ſuch an opinion: and in reſpect

ſpect to the unhappy ſtate of his mind, I account for it from the ſame cauſe, having obſerved that cancerous diſeaſes and inſanity are more nearly related than hath commonly been taken notice of. The *encephalon* no doubt is affected by that incorrigible acrimony which attends all cancers, and as a proof of this we may ſee that people labouring under ſo dreadful an infirmity are generally ſubject to *fits* of the worſt and moſt ſtubborn nature, in conſequence of which the operations of the mind become diſturbed and irregular, and the diſpoſition ſaturnine, melancholly and inactive. Theſe diſeaſes are ſometimes hereditary, and will deſcend to poſterity, breaking out at different times, appearing in various ſhapes, uniting with others in a manner ſcarcely to be traced out, and operating in an infinity of modes and circumſtances impoſſible to be fully explained.

But granting that this conjecture may account for the cauſe of this patient's misfortune, I have ſince been revolving in my mind whether anything was omitted in the caſe which might have been of real ſervice; and I frankly own, that if a caſe anywiſe ſimilar ſhould again occur to me, I would uſe *opium* more liberally than I did in this. Pain in ſuch an extreme ought to be ſubdued at all events, and therefore I recommend (and I will for the future give) the largeſt doſes till the deſired end is obtained; taking care however to counteract any bad effects that may arile from them by proper dilution and glyſters.

In the ſpace of three years four accidents happened, producing almoſt ſimilar effects, by forceing

ing the *tibia* off from the *aſtragalus*; tho' varying in ſome other circumſtances, in reſpect to the different degree of laceration. All of them however required amputation, and in three the operation was performed; one was the caſe juſt now related, the two others did well: the fourth was an old man, who obſtinately refuſed to loſe his leg, and lay for a long time in a miſerable condition, ſuffering all the pain and ill effects, which muſt unavoidably happen in a fracture of the joint, and dying at laſt of a mortification in the wounded part. I deemed it unlucky to have all thoſe caſes fall under my care, becauſe very little reputation is gained by performing amputations, eſpecially in recent fractures, when it is moſt eligible and moſt expected to ſave the limb. However, as theſe exigencies will now and then happen, the man who is conſcious that he acts upon right principles ought to be incapable of fear, and above minding the cenſure of the undiſtinguiſhing, the ignorant, and malevolent part of the world.

I ſhall conclude this article with obſerving, that in all fractures and injuries, which in their conſequences, from the nature and ſtructure of the parts in queſtion, may prove dangerous; the greateſt judgment and ſagacity, and the moſt cautious deliberation are requiſite to determine when amputation is abſolutely neceſſary. To decide this point in caſes of ſudden accidents is ſometimes difficult: and in chronical diſorders affecting the joints in cancerous or ſcrophulous habits, though amputation may ſeemingly be the means of reducing the affair to ſimpler principles, yet we muſt

conſider

conſider whether the conſtitutional malady, cut off as it were in ſome extremity of the body, may not return with more fatal violence in other nobler parts. And again, it is to be obſerved, that in conſequence of amputation being performed upon ſudden occaſions in a full and perhaps a diſtempered habit, the conſtitution of the patient muſt undergo a very conſiderable change; for the force of the heart remaining the ſame, and the quantity of chyle and of blood generated equal to what it was before the accident, and a great portion of the arterial ſyſtem cut off which uſed to receive it, what muſt become of the ſuperfluous blood? I ſhould apprehend ſome ill effects from the check given to the circulation; but in what organs, or in what forms of diſeaſe they may appear I cannot pretend to determine, therefore I ſhall leave this as a matter of ſpeculation to be diſcuſſed amongſt thoſe who are fond of phyſiological enquiries.

## *Medical Problems or Queſtions.*

AN anonymous correſpondent juſtly obſerving that medical problems would tend to the advancement of medical knowledge, propoſes the following to the conſideration of the gentlemen of the faculty; and as it is much eaſier to aſk queſtions than to ſolve them, I have here ſtated his queries that they may be anſwered by ſuch readers of this miſcellany who chuſe to attend to them.

1. How

1. How to diſtinguiſh the *Gout* from the *Rheumatiſm* when it affects both the external and internal parts?

In anſwer to this queſtion we ſhall tranſlate a paſſage or two out of *Hoffman*. "The antient "phyſicians (ſaith he) comprehended all kinds of "pain infeſting either the external muſcular parts "or the articulations of the joints under the "name of arthritis or *gout*, the word rheumatiſm "not being then known. In the laſt age the "moſt eminent phyſicians of *France*, viz. *Piſo*, "*Riverius*, *Ballonius*, *Cheſneau*, diſtinguiſhed ſuch "pains as affect the middle part of the limbs, "the muſcles of the neck, arms, ſcapula, thighs, "hands, by the appellation of *rheumatic*: calling "thoſe pains *gouty* which have their ſeat in the "joints and their articulatitons." Again our author remarks, "That in the *rheumatiſm* the "muſcles with their membranes, and the tendons "at the places of their inſertion to the bones are "afflicted with great pain; but in the *gout*, the "ligaments and tendinous nervous parts at the "joints ſuffer ſtill ſeverer pain, inſomuch that in "an inveterate gout the diſeaſe becomes deeper "ſeated, occupying the very cavities of the joints. "The degree of pain therefore is different, for in "the *rheumatiſm* it is more tenſe and heavy, joined "with a ſenſe of cold without any remarkable tu-"mour or redneſs; but in the *gout*, it is lancinat-"ing, diſtending, pungent, juſt as if the parts "were tearing aſunder, attended with great ſwell-"ing and redneſs.*" From this deſcription of

* *Hoffm.* tom. iv. ſect. 2. cap. viii.

*Hoffman** we may gather, that the gout and rheumatism are nearly allied: but the moſt material point to be conſidered is, how far an accurate diſtinction made between theſe two diſeaſes will tend to inform our practice in the *modus medendi*? Will thoſe evacuations and remedies ſuppoſed proper in one caſe do harm in the other? I am afraid that no general rule can be laid down, becauſe a great variety of ſymptoms may occur in different conſtitutions, requiring even oppoſite methods of treatment, to be decided only by the judgment and ſagacity of the phyſician in each particular exigence.

2. *Hippocrates* ſays, black vomitings are always fatal; the queriſt hath known two men die within forty-eight Hours after the appearance of theſe ſymptoms:—from what cauſes then do they ariſe?

3. Whether the general uſe of bleeding in all fainting fits, even when there is little or no pulſe, is right? if ſo, how does this evacuation ſucceed, as evacuation is commonly ſuppoſed to weaken?

This is a queſtion of great importance, the moſt experienced practitioners having been ſometimes doubtful concerning the propriety of bleeding upon ſuch occaſions: for in ſome caſes where-

* It may be obſerv'd how frequently we make uſe of *Hoffman*'s authority in the courſe of this work. Indeed there is no one author from whom ſo much knowledge may be acquired as from him. The eſteem in which his works are held in *Germany* is great and univerſal. Perhaps ſome may think, that the medicines he recommends are not ſufficiently powerful on ſome occaſions, tho' his definitions of diſeaſes and ſymptoms are excellent.

in

ih that evacuation has been proved absolu
ceſſary, yet no indications in favour of it
upon firſt examination be taken from the pulſe.
It is very difficult to determine in what manner
the *encephalon* is affected by the circulation, and
*vice verſa* in what manner the arterial ſyſtem is
impeded in its operation, by the paſſions of the
mind, or by nervous ſymptoms, from whatever
cauſe ariſing. Even in apoplexies an indiſcrimi-
nate uſe of the lancet hath been extremely preju-
dicial, as likewiſe in epilepſies and paralytic diſ-
eaſes; for many of theſe require medicines that
inſtantly irritate, volatiles, external frictions, and
acrid applications to rouze the vital powers, and
reſtore to action thoſe important organs whoſe of-
fices have become ſuddenly ſuſpended. By what
criterion therefore can we judge, or what certain
rule can we lay down, in regard to the propriety
of bleeding in fainting fits, or in diſorders of the
*encephalon*, or in a ſudden deprivation of the
ſenſes? Theſe are queries which we beg leave
to ſubmit to the conſideration of more able and
experienced phyſicians.

## *Good effects of the* Cicuta, *in a diſeaſed* Eye-lid.

G. P. upwards of eight years of age, very
healthy from his infancy, was ſeized in De-
cember laſt with a complaint in his eyes: both of

elled prodigiously, were very painful, and ged a great quantity of hot water. The parents of the boy fomented his eyes at first with a decoction of emollient herbs, and applied some *Cerat. Epulot.* with a poultice of bread and milk over the whole. This they continued for the space of one week, during which time he was purged with pil. ex colocynth. simp. However no sensible amendment was perceived, but on the contrary the upper lid of the right eye became inverted, and swelled in such a manner, as totally obstructed the sight of that eye. This swelling appeared more like a fleshy excrescence bulging out of the eye, than what it really was a great enlargement of the inner eye-lid inverted.

The surgeon consulted in this case ordered first a strong fomentation of *Hemlock*, together with a poultice of the bruised herb mixed with bread and milk. At the same time the patient took *Pulv. Basilic.* in proper doses and intervals of time. The swelled Part was scarified, which operation gave great relief; the discharge from a hot watry humour, became of a better consistence, resembling mild *pus*. Still the swelling and obstruction of sight remained the same, and therefore the *Cicuta* was given internally, in the following form mixed with Calomel. and Pulv. Jalap.

℞ Extr. Cicutæ.
Calomel. pp.
Pulv. Jalap. aa. gr. vi, m. f. Pil. vi, capiat unam omni nocte h. s.

He

He continued taking these pills for a week, and then the quantity of Cicuta was increased to gr. iß. and afterwards to *two grains*: with the use of these pills and the poultices, the eye became much better, and at the end of two months the inner portion of the eye-lid (at first so horrid a spectacle) bulged out no more, and the patient recovered his sight and the free motion of the eye-lid likewise.

Perhaps some objection may be made to admitting this case as a clear example in favour of the *Cicuta*, because other medicines were joined with it: but if we reflect that little or no benefit was obtained till the *Cicuta* was used both internally as well as externally, there will scarce remain any room to doubt its efficacy in this, and perhaps in similar cases. I have purposely selected some other patients in order to give the *Cicuta* a fair trial: for altho' Dr. *Stork*'s book appears very extraordinary, and his assertions very extravagant, yet it certainly will be entitled to praise, if the least good results from it; and the *Cicuta* will be a very useful addition to the articles in the materia medica if it proves capable of abating in any degree either cancerous or scrophulous acrimony.

## *A fatal flooding Case, and an Adhesion of the* Placenta.

S. *F.* a woman of twenty-three years of age being in labour of her first child, sent for the midwife on *April* 28, about four o'clock, and was delivered

delivered at ten the ſame night. The *funis* being twiſted ſeveral times about the child, was broke off in the delivery cloſe to the *Placenta*; the woman flooded very much, and the midwife ſent for more aſſiſtance, but all endeavours uſed to extract the *Placenta* proved ineffectual: the patient died about twelve o'clock the next day, and in proper time the body was opened.

The *uterus* being laid open, the *Placenta* was found ſo ſtrongly adhering to the *fundus*, that the operator could not poſſibly ſeparate it: a manifeſt proof in favour of that opinion heretofore advanced of the impropriety of uſing violence in delivering the *Placenta*. And in order to demonſtrate the impoſſibility of extracting in this caſe, and to remove the prejudices too much prevailing, the parts in queſtion were ſhewn to the attendants, and the nature of the adheſion diſtinctly explained. During the pregnancy of this woman ſhe was free from complaints, excepting a pain in the ſide, for which ſhe was now and then obliged to loſe blood.

## COMMENTARIES on NEW MEDICAL BOOKS.

WE ſhall now finiſh the account of the medical productions in 1767, in as conciſe a manner as poſſible, ſtill omitting for the preſent the books wrote upon *Inoculation*, which we propoſe to review hereafter in a ſeparate article, reſerved for that ſubject. In regard to the performances

ances in 1768, they will require more particular notice, as the title of this Miſcellany expreſſes the intention of the author to give an account of the *preſent* ſtate of medical literature. I ſhall mention the books in the ſame order they were read.

*Medical Eſſays and Obſervations, by* Charles Biſſet, *M. D.*

Dr. *Biſſet*'s Eſſays contain many uſeful practical remarks, extremely well calculated for thoſe who reſide in the *Weſt-Indies*. In the ninth article, which he calls, *A Phyſiological Inquiry, relative to Perſpiration, and the ſpeedy Admiſſion of topical Medicines to deep ſeated local affections*; our author obſerves towards the concluſion of it, that the diſcovery of the valved lymphatics is by no means new; and then quotes almoſt the ſame paſſages from *Hoffman* as have been cited in this Miſcellany.* Thus we ſee that different perſons may uſe the ſame expreſſions without being guilty of plagiariſm, for that article of the Medical Miſcellany was wrote before the author had ſeen the paſſage in Dr. *Biſſet*. It would take up too much room to give quotations out of this author, whoſe ability and diligence in his profeſſion are unqueſtionable, and therefore I ſhall content myſelf with recommending his book in general to the peruſal of gentlethe faculty.

*Practical Directions, &c. by Dr.* Harvie.

Dr. *Harvie* (whoſe merit in teaching Midwifery hath greatly recommended him) gives in this work

* Vid. *Med. Miſc.* pag. 79, and 80.

of

of his the ſame opinion relative to extracting the *Placenta*, as hath already been advanced in this Miſcellany. And he likewiſe here teaches a method of preſerving the *perinæum* in labour, nearly the ſame to that which he ſo frequently hath recommended in his lectures: but in this as well as many other circumſtances in practice, every man's reaſon muſt ſuggeſt to him thoſe methods which in variety of ſituations and exigencies it is impoſſible to deſcribe in books, eſpecially in ſuch caſes where manual operations are to be performed.

*London Medical Enquiries and Obſervations. Vol. 3.*

In regard to the London Medical Eſſays ſo long expected by the world theſe having the ſanction and being publiſhed by the order of a very learned and reſpectable body of men, muſt conſequently contain many valuable articles; and indeed there is a reſpect due to a ſociety which few individuals can claim. Thoſe readers who have profited by the preceding volumes will not find their expectations diſappointed in this. I ſhall beg leave to make a few remarks on ſome of the articles in this uſeful collection.

The ingenious Mr. *Bayford*, after deſcribing the appearances of two aneuryſmal tumours * in a

* Theſe humours differed in ſize and ſituation; the leaſt was an enlargement of the common trunk of the right ſubclavian and carotid arteries, the larger was an aneuryſmal ſac formed in conſequence of a diſtenſion of the *Aorta Deſcendans*, by which means the 11th and 12th vertebræ of the back were eroded, together with ſome portion of the intervertebral ſubſtance.

patient

patient, whoſe body he examined, which appearances are more clearly expreſſed on copper-plates well engraved, proceeds thus, " The cauſes " of aneuryſms which are not evidently derived " from external injuries, are ſo very obſcure, that " I ſhall readily ſtand excuſed, I believe, for not " hazarding any reaſoning upon the ſubject; but " that I may not appear to have given the hiſtory " of a uſeleſs diſſection, I ſhall venture to make " a few obſervations, which naturally ariſe from " the caſe.

" It is ſome ſatisfaction to be enabled to ac- " count for morbid ſymptoms, though the diſ- " eaſes which give riſe to them, may be in their " own nature incurable; for, where we cannot " relieve, we ſhall at leaſt be prevented from do- " ing harm. In the preſent caſe, every ſymptom " which afflicted this poor man was fully explain- " ed by the examination of the body after death. " The pulſation of the part is underſtood from " the nature of the diſeaſe; the laborious and " painful reſpiration, was undoubtedly owing to " the connexion of the aneuryſmal tumour with " the *diaphragm*, as was the dropſy probably to " the obſtruction of the refluent blood in the *vena* " *cava inferior*, and the ſevere pains in the back " to the eroſion of thoſe parts. Now, though the " aneuryſm which produced this variety of dread- " ful ſymptoms, was in itſelf incurable, yet the " cauſe being underſtood, all thoſe remedies which " might have been exceedingly proper in an

" *aſthma* or *dropſy* alone, would have been here " either uſeleſs or hurtful."

Again Mr. *Bayford* ſenſibly obſerves, " I think one may venture to pronounce, that there is no certain criterion for diſtinguiſhing the exiſtence of an internal aneuryſm, before it has made its way to the ſurface of the body. It may, 'tis true, produce a variety of ſymptoms, by its preſſure upon the neighbouring *viſcera*; but will not the ſame ſymptoms follow from any other tumour, ſimilar in ſize and ſituation? It is certain, that the mere pulſation of a part muſt ever be deemed equivocal, as that ſo often happens without any manifeſt diſeaſe in the arterial ſyſtem.*"

We come next to ſome caſes of *emphyſema*; and here it is incumbent upon us to premiſe, that the firſt accurate caſe of this nature was related by Dr. *Hunter*, in the firſt vol. of the London Medical Enquiries, from the deſcription of which, as a maſterly performance, he hath gained great honour.—All theſe ſubſequent caſes are recorded, and depend upon the ſame principles; and therefore, tho' they have great merit in themſelves, we ſhall not enlarge upon them. At the 12th article I beg leave to ſtop, that I may aſk Mr. *Burchall* in the moſt reſpectful manner, whether or not he hath obſerved any future ill conſequences, in regard to the health of the patient, whoſe thigh he ſo ſucceſsfully preſerved, by performing the opera-

* An example or two confirming the truth of theſe remarks, will be given in our next Number, with full illuſtrations.

tion

tion for an aneuryſm in the crural artery? In the 14th article we have an aſtoniſhing account of a diſeaſed eye, communicated by Mr. *Hayes* ſurgeon, in which caſe no leſs than *ſeventy grains* of *Extract. Cicut.* were given in a day, and repeated for three or four days: this caſe proved fatal, notwithſtanding the moſt able phyſicians and ſurgeons in England were conſulted. In the 15th article Dr. *Dickſon* communicates ſome caſes, which plead in favour of the application of *Veſicatories*, to the region of the *os ſacrum*, in incontinence of urine; and at the ſame time the inefficacy of the *Uva urſi* is mentioned. In the 22d article we have a relation of ſome experiments made with the decoction of the root of the *Mezereon*, in caſes of venereal nodes, by Dr. *Alexander Ruſſell*. I rejoice at the leaſt proſpect of hope, to find any *ſimple* medicine poſſeſs the power of diſperſing ſo obſtinate a complaint as the venereal node. In the 34th article we meet with ſome melancholy caſes of the bite of a mad dog, related by Dr. *Dickſon*, in which we find that all methods, tho' judiciouſly adminiſtered, were unſucceſsful: none of the three patients who were bit by this ſame mad dog, went to the ſalt water: and therefore I am deſired to take this opportunity of aſking, what method it is moſt adviſeable to purſue in theſe dreadful exigencies? What would a phyſician himſelf do on ſuch an occaſion? Would he depend upon mercurial unction, upon the *tonqnin* medicine, or upon dipping? the queſtion is intereſting, and I hope ſome gentleman of the faculty

will be ſo obliging as to give his ſentiments more fully and explicitly upon it.

After theſe few obſervations on ſome articles in this medical collection, it behoves me to ſay, that the whole performance merits the higheſt praiſe, and will it is to be hoped, always meet with equal encouragement.

*A Review of the* Venereal Diſeaſe *and its Remedies, by* William Fordyce, *Surgeon.*

In the next place we are to mention Mr. Fordyce's review of the venereal diſeaſe. To do this performance ample juſtice, would require more pages than the limits of this work will allow: I may ſafely aver, that thoſe who are moſt converſant and capable in this branch of practice, will have moſt reaſon to eſteem this work, of which here follows a conciſe analyſis: Our author in his introduction gives ſome ſenſible cautions againſt relying too much upon great authors: *Sydenham* is cenſured for uſing draſtic purges; *Boerhaave's* opinions are diſputed, particularly when he ſays that mercurial medicines are not neceſſary, in the firſt ſpecies of a Gonorrhea: Inguinal glands will become diſeaſed in the ſecond ſtage, in ſpite of purging; in the third ſtage, *Cowper's* glands are affected, and the venemous matter flows off with the diſcharge; but *Boerhaave* is deficient in not ſpecifying when mercurials are to be uſed: In the fifth ſpecies his method is too ſevere, moderate uſe of *Ung. Mercur. Cort. Peruv.* Milk diet and ſoftening decoctions are recommended. The opi-

nion

nion of *Boerhaave*, that a confirmed pox is lodged in the fat, which he ſays ought to be entirely melted down to obtain a cure, is falſe in practice; for the natural balſam of the blood muſt firſt be reſtored, the diſeaſe only hid for a time by his lowering plan breaks out afreſh upon change to a plentiful diet. *Aſtruc's* notion of a Gonorrhea never terminating in a pox, if a free diſcharge is promoted, erroneous: *Corroſive ſublimate* is proved often ineffectual and pernicious, and is too much truſted by empirics. Gonorrhea accurately deſcribed, when virulent, not ſpeedily cured: free running not a preſervative from infection, but ſometimes the very cauſe * of it, unleſs prevented by a ſeaſonable interpoſition of mercury. mercurial inunction the grand ſpecific,—ſevere purging utterly wrong, it irritates the bladder and urethra by ſtimulating the *rectum* too often,—ſtrict attention to regimen neceſſary,—gentle purging proper, if that does not ſucceed, then uſe the mercurial inunction,†—caution againſt exceſſive dilution,—nitre and diuretics improper,—repeated bleedings neceſſary,—the ſcrotum ſhould always be kept up,—in the ſwelled teſticle mercurial inunction to its full extent, ſarſa & bardana drinks and cicuta poultices,—Gleets often ill treated, aſtringents improper, *Daran's* method and dexterity praiſed,—repelling buboes wrong practice,—mercurial unction or application to chancres and

* I ſuppoſe from abſorption.

† But with our author's leave I muſt needs obſerve, that *Calomel* is very often neceſſary, and in ſevere pain or chordee, *Opium*.

other

other venereal ſores and tumours, before the general habit is thoroughly rectified by a proper courſe, abſolutely condemned.—In ſcorbutic and ſcrophulous habits, antiſcorbutics, corroborants, open air, will mend the ſores,—in ſcrophulous diſeaſes combined with venereal mercury does harm,—cancerous buboes curable by hemlock,—this and other *aconite* medicines highly recommended,—in chancres mercurial application inſufficient for a cure,—inunction is requiſite,—the diſeaſe repelled by mercurial dreſſings frequently returns with aggravated ſymptoms. Does mercurial unction always effect a cure?—always in healthy bodies, but in conſtitutions vitiated, and in complicated caſes due regard muſt be had to correcting the impure juices, to reſtoring the blood to a balſamic ſtate, and to diſentangle the infection from the habit,—ſarſa highly recommended,—the venereal diſeaſe always progreſſive,—never abates of itſelf,—muſt be diſengaged from other infections, and then mercury will ſucceed,—in ſcorbutic and ſcrophulous habits, *Cort. Peruv.* and *Cicuta* muſt pave the way for a cure,—injection condemned,—neither a cure nor a preventive,—prophylactics,—the beſt is hydrargyrum diſſolved in animal or well-boiled vegetable oil, and rubbed upon the *penis ante coitum*,*—of mercurial preparation,—its ores condemned,—the beſt unguent is made with *arg. viv. & axung porcin.* aa. *p. æ.*—inunction to be performed on the thighs,

* I look upon all attempts to invent a preſervative againſt venereal infection as ridiculous and vain; the poiſon is too ſudden in its operation, and too ſubtle to be guarded againſt.

and

and groin, wearing flannel drawers in winter and linen ones in ſummer.

This is the ſubſtance of Mr. *Fordyce*'s doctrine concerning the venereal diſeaſe, eſtabliſhed no doubt upon ſound and rational principles, and confirmed by experience.

*An Hiſtorical Account of a New Method of curing the Scurvy at Sea, by* D. Macbride, *M. D.*

This gentleman recommends the uſe of *Wort* in that deſtructive malady the Sea ſcurvy, and produces ſeveral caſes to prove the efficacy of this remedy: certainly all attempts to preſerve the Lives and health of that brave race of men the ſailors, will always meet with applauſe and encouragement. Some of the experiments here mentioned are not ſo concluſive as might be wiſhed, owing to the want of *Malt*, from which deficiency the reſult of them remains ſtill dubious and undecided.

*Elements of the Practice of Phyſic by* G. Fordyce, *M. D.*

To give a complete and rational ſyſtem of phyſic in all its various branches ſeems to be a taſk exceeding the abilities of any one *Man*.—To judge of the merit of ſo arduous an attempt, is beyond the ſkill of any one *Critic*.

*Eſſays Medical and Experimental, by* T. Percival, *M. D.*

Dr. *Percival* is an elegant and entertaining writer. In his two firſt eſſays, entiled the Empiric

ric and Dogmatic, if the reader does not discover any great practical merit, yet certainly he will allow them to be good *School Exercises*: In the other three eſſays, viz. iii. Experiments and Obſervations on Aſtringents and Bitters,—iv. On the Uſes and Operation of Bliſters,—v. On the Reſemblance between Chyle and Milk, we find many uſeful remarks worthy the attention of the medical reader, and proving the author to be a ſkillful phyſician.

*The Gout by* R. Ingram, *Surgeon.*

There are in the news papers many quack advertiſements, impoſing on the credulity, and diſgracing the legiſlature and ſenſe of this nation: but we are ſorry to ſee *Books* proſtituted for the ſame purpoſe.

*A Treatiſe on Diet, &c. by* F. de Velangin, *M. D.*

This author mentions in one of his caſes, that he recommended riding upon an aſs round Moorfields to a London tradeſman, as a gentler mode of exerciſe than what is commonly uſed. How far this will be deemed an improvement in the *Gymnaſtic* part of medicine we ſhall not pretend to determine, but we may venture to ſay, that in many paſſages of his performance the author does not appear to have ſtudied the *art of narration* with much ſucceſs.

This is the general idea I entertain of the medical productions in 1767. As to thoſe publiſhed in this preſent year 1768, an account of them will be given hereafter.

# Obſervations *on the new Method of* Inoculation.

TO enter into the merits of Inoculation in general, when ſo many authors have already wrote upon the ſubject, and ſo long an experience hath proved the uſefulneſs and ſucceſs of this ſalutary practice, would now be deemed an unneceſſary, and even a diſagreeable taſk: It would appear to be only a tedious repetition of arguments whoſe validity, time and facts have ſufficiently confirmed; and as theſe conſtitute the beſt evidence in favour of any doctrine, we cannot more effectually ſerve the cauſe of Inoculation, than by appealing to ſuch innumerable and unanſwerable teſtimonies.

But it muſt be remarked, that although the received practice of Inoculation had proved generally ſucceſsful; yet ſeveral difficulties occurred, and conſequently many objections were made, which not only furniſhed arguments to the ſuperſtitious oppoſers, but likewiſe deterred the cautious; nay even the ſanguine promoters of that expedient, from recommending and performing, with an alacrity equal to its ſucceſs, an operation trifling, eaſy, and ſafe in itſelf, and productive of the moſt important benefits to Society; being the means of ſecuring and preſerving mankind from ſo loathſome and dangerous a diſeaſe as the *Small-Pox*;

a diſeaſe, we may add, not originally belonging to the *Engliſh* climate or conſtitution, but accidentally brought from foreign parts, and ingrafted by infection; a diſeaſe which I hope in time will be rendered innoxious at leaſt, if it is not totally exterminated by proper methods and management.

Many improvements therefore were long wanting in this branch of Medicine; and accordingly improvements equal to our moſt ſanguine wiſhes have lately been introduced. From what ſource, or from what particular exertion of human reaſoning and faculties they aroſe, I will not pretend to determine. It ſeems moſt probable that we owe them in their firſt rude ſtate, to ſome of the moſt ignorant and loweſt amongſt the people: "How much ſo-"ever ſuch a reflection may mortify the pride of "men of ſcience, (ſays Dr. *Baker*) it cannot but be "acknowledged that the art of medicine has, in ſe-"veral inſtances, been greatly indebted to accident; "and that ſome of its moſt valuable improvements "have been received from the hands of ignorance "and barbariſm. This truth ſeems remarkably "exemplified in the practice of Inoculation of the "Small-pox; a practice which chance ſeems to have "firſt ſuggeſted, and of which ſome poor unknown "illiterate woman was probably the original diſ-"coverer." *Dimſdale* tells us, in his Introduction, "I firſt heard, and with the utmoſt ſatisfaction, "that in ſome parts of the nation a new and more "ſucceſsful method of inoculating was diſcovered "than had hitherto been practiſed. The relators "gave incredible accounts of the ſucceſs, which

"was

"was the more marvellous, as the operators were "chiefly ſuch, as (by report) could lay but little "claim to medical erudition." But whether ſtudy, or gradual experience, or natural and intuitive ſagacity, or meer accident, firſt ſuggeſted the means of Inoculation, or its improvements, is a queſtion not eaſily to be anſwered: perhaps, in regard to ſociety, it is immaterial whether it is anſwered or not; or whether we receive inſtruction from the grave and ſolemn doctor, or from the itinerant: we frequently find amongſt a free people, that ſome of the lower orders, as well in political as in medical matters, will ſtart improvements which the college or the council would never have thought of. Let it then ſuffice, that we are able to render theſe improvements ſubſervient to the general welfare and preſervation of our fellow-creatures; and not only in the diſeaſe under preſent conſideration, but in others likewiſe upon ſimilar principles, though with proper cautions and reſtrictions.

Nor will it be deemed of much conſequence to aſcertain exactly the æra when the new method of Inoculation was firſt known: moſt probably it was found out by gradual obſervations, and by repeated experiments, though it became chiefly popular in 1765. In regard to the particular perſon to whom the honour of the diſcovery hath been aſcribed, we have no authority from himſelf to ſay any thing: Mr. *Sutton* carefully avoided the publiſhing of his method, and the giving us an hiſtory of his proceedings: what we learnt firſt

was from reports and popular fame, which ever delights in the *wonderful*.—Yet it cannot be denied that the *vox populi* was in this inſtance right, and that Mr. *Sutton* had a very juſt claim to praiſe for his improvements, though he never acquired that glory which is due to thoſe who generouſly communicate their knowledge for the public good, and are deſervedly eſteemed and ranked amongſt the friends and benefactors to mankind.

This glory to which illiterate minds can ſcarcely ever aſpire or arrive, Dr. *Dimſdale*, endowed with great ſagacity and ſuperior abilities, hath with univerſal applauſe obtained. He had long been making obſervations, he had derived all neceſſary information from reading, he compared every circumſtance in practice, with his own and others' opinions, and at length happily ſucceeded in finding out the moſt rational and ſafe method of Inoculation hitherto known. He did more: he immediately publiſhed his ſentiments for the good of mankind, and generouſly explained the principles upon which he grounded his practice, and his book is undoubtedly one of the moſt uſeful medical productions that ever appeared. From the time of his publication, therefore, we may juſtly date the æra of the new method of Inoculation; and the merit which *Sutton* might have claimed, had he been equally open and explicit (ſuppoſing him equally capable of writing) was by all juſtly attributed to *Dimſdale*: upon this foundation therefore the matter ſeems to reſt; what *Dimſdale* wrote deſerves our thanks, and may be relied upon as authentic;

authentic; but as to what others wrote concerning *Sutton*'s method*, (a method which he never publiſhed)

* Here it ſeems proper to ſubmit to the reader, the opinion of the greateſt perſons of the faculty, relative to Mr. *Sutton*'s Inoculation, in a letter ſigned by their names, in which is exhibited, a fair and candid view of the matter.

*The opinion of his Majeſty's Phyſicians and Surgeons, given Jan.* 23, 1768, *in regard to Meſſrs.* Suttons *practice in Inoculation, in conſequence of a letter from Sir* John Pringle, *dated* London, May 6, 1767, *to Mr.* Brady *at* Bruſſels; *and another from Count* Kaunitz Rittberg, *dated* Vienna, Dec. 17, 1767, *to Count Seilern, Ambaſſador from the Empreſs Queen to the King of Great-Britain.*

*London, Jan.* 23, 1768.

"The Phyſicians and Surgeons of the King of Great-Britain, in obedience to his Majeſty's commands, tranſmitted to them by the Earl of Hertford, his Majeſty's Lord Chamberlain, have peruſed and duly conſidered two letters delivered to them; one from Count *Kaunitz* to Count *Seilern*, dated Vienna the 7th of December, 1767; the other from Sir John Pringle to Mr. Brady at Bruſſels, dated London the 6th of May, 1767, upon the ſubject of the Inoculation for the Small-Pox.

They humbly beg leave to obſerve, that no report whatſoever, in reſpect to the *general* ſucceſs of Inoculation in this country, can greatly exceed the truth; that for many years paſt ſcarce one in a thouſand has failed under the inoculated Small-Pox, even before the time of the *Suttons*, where the patients have been properly prepared before, and rightly treated during the eruption, with reſpect to external heat, diet, cooling and opening medicines.

That by a ſteady obſervance of theſe rules, and by a much freer uſe of the open and even cold air, than was formerly known in this country, Meſſrs. *Suttons* and others have communicated the Small-Pox with great ſucceſs, and have thrown ſome new lights upon the ſubject of Inoculation, particularly with reſpect to the expoſing of patients to the open air; that

liſhed) it appears to be moſtly conjecture, and opinion undecided by facts. No wonder then that *Dimſdale* has ſince obtained thoſe rewards and honours

that the inoculators in England in general have adopted this method, and experience the ſucceſs of it daily.

That they are of opinion, that the great ſucceſs of Meſſrs. *Suttons* is to be attributed to the advantages ariſing from the expoſition to colder air, from a judicious treatment, and the due obſervance of ſome other rules, which have uſually been followed in this country before, and not to any *peculiar Noſtrum*, or *ſpecific remedy*.

That they have no doubt, but that the method of Inoculation practiſed in England with ſuch univerſal ſucceſs, would be as ſucceſsful at Vienna, provided the Inoculation was performed with the ſame ſkill and prudence, and the patients were equally ſubmiſſive to the rules directed.

In anſwer to the extract from Sir *John Pringle*'s letter, they beg leave to make the following obſervations: It is ſaid, that the number of puſtules on the whole body of a patient inoculated by Mr. *Sutton* does not exceed one hundred, or two hundred at moſt, commonly not a dozen: if it is meant that the number of puſtules *can be determined*, and that they will *never exceed* two hundred, they beg leave to obſerve, that this is not an exact repreſentation of the caſe; for though it will very frequently happen that the number of puſtules will not be more than a dozen, yet ſometimes, though very rarely, they will greatly exceed two hundred.

It is ſaid that Mr. *Sutton* does not require his patients to keep in doors: this paſſage ſeems to imply that it is at the option of the patients whether they will go out or no; but the truth is, they are ſtrictly enjoined to go abroad, and to expoſe themſelves to the open air. It is ſaid that Mr. *Sutton* has inoculated 40,000 patients *without loſing one*. They are not able to aſcertain the number that he has inoculated, but believe he has not always been ſucceſsful, though he has failed ſo very ſeldom, that they do not think that it ought to be conſidered as any objection to his method. Sir

nours in *Ruſſia* which he juſtly merits, and that his book is become the ſtandard of our practice in Inoculation, from which every man may be inſtructed ſufficiently in eſſential points, whatever alterations particular circumſtances and conſtitutions may require, or whatever obſervations may lead to future improvements.

Immediately upon the publication of Dr. *Dimſdale*'s treatiſe, the ſpirit of Inoculation was diffuſed all over the kingdom: every man became deſirous of ſharing the profit and the fame ariſing from an operation apparently ſo eaſy and ſucceſsful: advertiſements were publiſhed without number, and, in ſhort, one would have imagined that all other

Sir *John Pringle* adds, that when Mr. *Sutton* is called to people in the natural Small-Pox, who are in danger, and at the height, or criſis of the diſtemper, the firſt thing that he does to relieve them is, to expoſe them to the open air; to carry them into it if it be poſſible, and this even in the winter; and if they are not in a condition to be removed, he orders all the windows and bed-curtains to be thrown open. They apprehend *this practice* has been found unſucceſsful.

The *Suttons* are, undoubtedly, in ſome reſpects improvers in the art of Inoculation, but by applying their rules ſo generally, and by their not making a proper allowance for the difference of the conſtitutions, have frequently done harm. All their improvements have been adopted by other inoculators, and in the hands of theſe the art ſeems to be carried to very great perfection. Signed

Wm. Duncan,
Cl. Wintringham, } Phyſicians to the King.
R. Warren,

J. Ranby,
C. Hawkins, } Surgeons to the King."
D. Middleton,

diſeaſes

diſeaſes had ſuſpended their ravages, and that the ſurgeons had nothing elſe to do but to propogate a new one. The regular practitioners ranged themſelves under *Dimſdale*'s banner; the itinerants under *Sutton*'s: tho' many of the regulars were induced to become diſciples and allies, or rather tributaries to the latter, paying a certain ſum for the communication of his ſuppoſed ſecret, and the uſe of his name. The practice of the itinerants however ſeemed to prevail, tho' in time it has returned again into the hands of the regulars, in proportion as facts have proved their claim equal from the ſucceſs which they have had. But it muſt be confeſſed that ſome few inſtances of ill ſucceſs have occurred, which, for a while might check the rapid progreſs of Inoculation amongſt the regular ſurgeons, though by no means can theſe accidents invalidate the force of argument in favour of it, or of thoſe innumerable examples which prove the general uſefulneſs and ſafety of the new method, as explained by *Dimſdale*: Too much precipitation, confidence, and neglect, the intervention of ſome other diſeaſe, an imprudent uſe of mercurials, and in ſome reſpects the uncertainty of the operation itſelf, and of the effects of the variolous matter in certain diſpoſitions and habits, may occaſion untoward ſymptoms, and even an unfortunate event: therefore we muſt not be too ſecure and ſanguine, notwithſtanding we know how to prepare our patients, and are quite convinced of the ſurpriſing efficacy of cold air and cold water in extinguiſhing the eruptive fever in it's

firſt ſtage and appearance; but we muſt ſtill exert all our ſkill and vigilance which we ſhall find frequently requiſite in order to maintain the reputation of the practice, and to obviate ſundry inconveniences and dangers that may occur.

If we are to conſider *Dimſdale* the firſt author of the new method of Inoculation, (an honour to which I think he has a juſt title becauſe *Sutton* has afforded us no information) we muſt then refer to his book as the ſource and fountain from whence all our knowledge in this particular point is derived, and therefore our obſervations on Inoculation would be concluded of courſe. But as ſeveral authors of great abilities have exerciſed their talents and enquiries upon the ſame ſubject, it is neceſſary to give a ſhort account of their publications; after which I ſhall exhibit a few caſes illuſtrated with ſuch remarks as will compriſe all that I have to offer upon the occaſion in as conciſe a method as poſſible.

I will not pretend to exactneſs in regard to the order of time in which theſe publications appeared. Dr. *Baker*'s *Enquiry*, if not prior in time, is certainly ſuperior in merit to many of them. In the hands of a man of ſcience any ſubject becomes inſtructive, and accordingly the reader will find in this learned gentleman's book a plain and candid account of the new method, and a ſenſible diſquiſition concerning the merits of it: he has favoured us likewiſe with an accurate examination of *Sydenham*'s ſentiments and practice in the Small-Pox at different æra's of his life fairly deduced from his

writings: from which we may trace the firſt ideas of the cold regimen in this diſeaſe, though the practice was not applied to Inoculation*. Dr. *Glaſs*, in his *Two Letters* to Dr. *Baker*, makes ſeveral excellent obſervations on the uſeful effects of ſweating during the eruptive fever, on which he ſeems to lay great ſtreſs as a means of producing a mild and favourable kind of Small-Pox: this opinion he ſupports by various examples in practice, and in ſhort declares that the ſucceſs, "depends principally on the patient's being kept "properly ſweating in the eruptive fever by ſome "medicines which are adminiſtered for this purpoſe." How far this correſponds with the *Suttonian* practice, or how eſſentially neceſſary it may be in ſome ſtages of the diſeaſe, I will not pretend to determine: but content myſelf with recommending theſe hints to the ſerious conſideration of inoculators, as well as the other obſervations of this excellent Phyſician and able writer contained in theſe letters, to all practitioners.

The next performance I ſhall mention is Mr. Chandler's *Eſſay towards an inveſtigation of the new*

* I take this opportunity of remarking, that ſo long ago as the year 1749 Mr. *Frewen*, then Surgeon at *Rye* in *Suſſex*, publiſhed a pamphlet on Inoculation, in which he had an imperfect glimpſe of the great uſe of cold water though he does not ſeem to purſue the idea, or to bring it to any effect in point of practice: "Small beer, (ſays he) barley water, "milk and water, emulſions, pectoral apozems, are common "dilutors to be drank plentifully; but I prefer good ſoft "water, drank *quite cold*, or with a toaſt, to all other things, "being convinced, by repeated experience, that it exceeds "all the reſt." *Frewen* on Inoculation, page 30.

*Method*

*Method of Inoculation*, who writes very candidly and intelligently upon the ſubject, and makes ſome comments upon Dr. *Baker* and Dr. *Glaſs*, giving his own opinion that the ſucceſs of the new method is principally owing to the uſe of crude variolous lymph in communicating the infection.

Dr. *Ruſton's Eſſay on Inoculation for the Small-Pox* contains chiefly an account of the modes of preparation uſed in *America* and in his own practice, together with a chymical examination of the different formulæ of mercurials, upon which claſs of medicines differently modified he ſeems to depend very much: In the appendix to the work we are informed of ſome experiments made in order to determine the nature and compoſition of the medicines uſed by Mr. *Sutton*.

As to Dr. *Langton's* pamphlet wherein he endeavours to prove that the inſertion of crude lymph does not produce the true Small Pox, his opinion in this point is void of foundation, and if I remember right he withdrew his objections in the public papers.

The ingenious Mr. *Holwell* has publiſhed an accurate account of the method uſed in the *Eaſt-Indies*, expreſſing a very humane wiſh that his work may be conducive to the promoting of the practice of the *Suttonian* or new method adopted in *England*.

Mr. *Bromfield*, whoſe chirurgical abilities are unqueſtionable, hath given us ſeveral uſeful hints and obſervations relative to the practice of Inoculation; as to points of controverſy I muſt refer to the

book itſelf*, and likewiſe to Dr. *Watts's Vindication of the new method* in anſwer to Dr. *Langton's* and Mr. *Bromfield's* objections, which will afford ample information to the curious reader.

Dr. *Maty* hath obliged the world with a tranſlation of Dr. *Gatti's Obſervations on Inoculation*, which is extremely uſeful and reflects honour upon the ingenious author for his abilities and candour.

I muſt not omit mentioning a pamphlet tranſlated from the Latin of Dr. *Cloſs*, in which the uſe of bliſters is recommended as productive of the moſt ſalutary effects in mitigating the primary fever of the Small-Pox; and likewiſe in ſeveral other ſtages and ſymptoms of that diſeaſe. I have in the courſe of practice obſerved that the diſciples of *Sutton* apply bliſters repeatedly in caſes when danger impends on account of too tardy an eruption; threatning the noble parts, or nervous ſyſtem; or when ſome important organ ſuch as the eye for inſtance is infeſted by puſtules. Undoubtedly this application is eſſentially neceſſary, as every attentive practitioner will allow who from conſidering the nature and operation of bliſters is enabled to be a complete judge of their uſefulneſs upon all ſuch emergencies above mentioned either in the natural or inoculated Small-Pox.

The next publication to be taken notice of is Dr. *Watſon's*, containing *A ſeries of Experiments inſtituted with a view of aſcertaining the moſt ſucceſsful method of inoculating the Small-Pox.* This may be juſtly called one of the moſt uſeful treatiſes upon

* *Bromfield's* thoughts ariſing from experience, &c.

the

the ſubject yet exhibited, becauſe it contains the moſt facts: therefore I cannot help recommending it as an excellent ſupplement to Dr. *Dimſdale's* book.

Laſtly, let me beg leave to mention a Latin commentary wrote by the author of the Medical Miſcellany. In this performance which is little more than an abridgement of *Dimſdale*, candour requires the author to acknowledge that he carried the notion of the anti-variolous efficacy of mercury too far; an error which future experience hath enabled him to correct*.

Upon the whole, from the collected opinions of various authors, from conſidering the nature of the diſeaſe in queſtion, and from obſervation and practice the following concluſions may be drawn.

*The Small-Pox is a diſeaſe* Sui generis *the matter of which can never be aſſimilated with other humours of the body, and conſequently it cannot poſſibly generate any other diſeaſe.*

*The Small-Pox can affect the blood but* once *(ſome few exceptions muſt be allowed though not ſufficient to invalidate the general obſervation) a peculiarity which diſtinguiſhes it from all other infectious diſtempers.*

*Inoculation is a means of introducing the* variolous virus *gradually into the lymphatic ſyſtem, affording us every opportunity of retarding it's progreſs, and ob-*

* This is a ſummary review of the principal productions which appeared upon the ſubject of Inoculation in 1767 and 1768.—I have avoided giving the titles at large, which any bookſeller will ſupply.—Perhaps ſome may be omitted which have not come to my knowledge.

*viating*

*viating it's malignity by the timely uſe of ſuch methods and medicines which experience hath proved to be moſt ſucceſsful: by theſe the blood is brought to the moſt healthful ſtate, and the diſeaſe affects it but ſlightly; yet ſufficiently to aſcertain it's nature, and ſecure the patient from any future attack, whether the puſtules do or do not maturate.*

*Preparation in regimen* and phyſic is neceſſary, though*

* In reſpect to regimen the following directions were given in hand-bills to the patients here along with the medicines:

Sutton *and* Shuttleworth's *directions for taking the incloſed medicines, &c.*

"Take one of the papers of powder at bed-time, in the "pulp of a toaſted apple, or any jelly, and next morning a "paper of ſalts diſſolved in a little boiling water, drinking "plentifully of water-gruel, cheeſe-whey, or ſmall tea, as "they work. The patient ought to be very careful of cold, "during the operation of the phyſic; and if it does not ope-"rate ſix or eight times in about ſix hours, it will be neceſ-"ſary to take half another paper of ſalts (more or leſs, as oc-"caſion requires) or if they be vomited up ſhortly after be-"ing taken, as ſoon as the ſickneſs is entirely off, one of the "other papers of ſalts muſt be given. The other powders "and ſalts muſt be taken as above, omitting two days be-"tween each doſe. The deficiency of ſalts may be ſupplied at "any apothecary's. It will be requiſite for the patient to "have a ſtool on each of the intermediate days during the "preparation; in order to which ſtewed prunes, roaſted "apples, or tamarinds, ſhould be eaten occaſionally."

*The Diet for Breakfaſt.*

"Tea, coffee, or chocolate, with dry toaſt, or ordinary "cake; rice milk, milk gruel, ſkimmed milk, honey and "bread, &c."

*For Dinner.*

"Plumb or plain-pudding, apple-pye, rice milk, frumen-"ty, and the production of the kitchen garden, with uſe of "ſalt."

*For*

*though ſome cautions ought to be obſerved in reſpect to the latter eſpecially in the adminiſtration of mercurials*. When the febrile ſymptoms come on, cold air and cold water are the moſt univerſal and effectual remedies: the uſe of purging medicines in this as well as other lymphatic and cutaneous diſeaſes is evident, but at the ſame time great caution and judgment are requiſite to adapt theſe medicines to each particular ſtage and ſymptom of the diſtemper, the degree of fever, the ſlowneſs of inflammation as alſo the exceſs of it in the arm: ſweating in the eruptive ſtate not inſiſted upon, although it may be adviſeable in the eryſipelatous efflorescence when the patients are to be confined to the houſe: bliſters by way of derivation will be frequently wanted."*

*For Supper.*

" Any of the above ſpoon-meats, roaſted potatoes, turnips, " &c. but, if it can be complied with, going to bed ſupper-" leſs, and to eat ſparingly, even at other meals, will be moſt " proper; abſtaining from all fleſh, butter, cheeſe, and ſpiced " food; moſt kinds of fruit may be eaten at pleaſure, except " on the phyſical days; on which days ſome allow broth.

" The common drink may be toaſt and water, milk and " water, lemon and water, or *Imperial* water, made by adding " a gallon of boiling water to an ounce of cream of tartar; " abſtaining from all ſpiritous, vinous, and malt liquors: " moderate exerciſe withal is neceſſary."

* Mercurials are not always proper but often injurious, eſpecially when adminiſtered indiſcrimately, in reſpect to quantity, and to the age and conſtitution of the patient. An itinerant operator employed to inoculate a child of a family of diſtinction in *Cheſhire*, gave a preparatory medicine which brought on an *Hypercatharſis* attended with violent gripings and bloody ſtools, to remedy which the family apothecary was ſent for, and the operator who made light of the matter was afterwards diſcarded.

To

To corroborate theſe opinions it may further be obſerved, that beſides thoſe particular circumſtances of the Small-Pox affecting the blood but once and for a ſhort ſpace of time only, it differs from other infectious diſeaſes in reſpect to the mode by which it is communicated to the blood; nor only ſo, but the operation of it when thus introduced bears not the leaſt reſemblance either to *venereal*, *ſcrophulous* or *ſcorbutic* acrimony: and this eſſential difference induces me to think very ſtrongly, that no one inſtance can be fairly proved of Inoculation being the cauſe of any other diſeaſe or humour in the habit except the Small-Pox. If we conſider the very nature of the Small-Pox, it's peculiar effect, it's tranſitory duration, and final extinction by the eruptive fever, and at the ſame time obſerve the mode in which other humours and infectious diſtempers appear and operate, theſe circumſtances compared, I ſay, will clearly evince the impoſſibility of poiſons ſo oppoſite in themſelves ever uniting. Is the progreſs of the Small-Pox in any conſtitution, rapid, dangerous, and virulent in proportion as ſuch conſtitution happens to be infeſted with venereal, ſcrophulous, or other humours? By no means: the variolous virus in fact neither adds to or diminiſhes, neither creates or cures any other humour but itſelf; therefore it cannot convey, or put in action the ſeeds of any other diſtemper. If we do not admit this poſition in it's full latitude, all arguments in favour of Inoculation would loſe great part of their weight, if we do, all objections muſt give way. But it may be aſked upon this occaſion, whether the venereal virus

does

does not combine with the ſcrophulous, or at leaſt whether the effects of it do not become worſe in Scrophulous habits, and if ſo, why may not the variolous virus mix or act with other acrimony? The anſwer is obvious: for the venereal virus is communicated in a different manner and acts upon different principles, it not only contaminates the blood but pervades the glandular ſyſtem and penetrates even into the bones, by which means it will unavoidably mix or at leaſt co-operate with other acrimony as experience often proves. Again, this infection does not excite any critical fever as the ſmall pox matter does, thereby extinguiſhing itſelf, but remains long obſtinately fixed in the habit rendering the blood impure unleſs ſubdued by a particular antidote, and even thus for a while extinguiſhed, the ſame cauſes will on ſome future occaſion operate and produce the ſame diſeaſe as virulent as ever.

The eruptive fever in the inoculated ſmall pox being in fact the criterion of the diſeaſe and the means of its total extinction, we find that the maturation of puſtules is not a point of that conſequence as hath commonly been ſuppoſed: and I much queſtion whether full puſtulation in the natural ſmall pox is in any degree inſtrumental in clearing the body from noxious humours. I allow indeed that preparation and medicine in both ſpecies may have beneficial effects independant of the diſeaſe itſelf, which cannot (as obſerved before) aſſimilate with other humours, much leſs correct or expel them: nor muſt erroneous pre-

judices induce us to think that future appearances of innate diſtempers are owing to inoculation or a ſuppreſſion of the eruption. The glandular ſyſtem which was infeſted with ſchrophula before inoculation or the natural ſmall pox took place, will remain ſchrophulous ſtill; for there is not the leaſt connection between the two diſeaſes, each acting upon different principles. In reſpect to the ſuppreſſion of the diſeaſe in its eruptive ſtate we find no ill conſequences ariſing from this mode of practice; at leaſt no facts have yet appeared to diſcourage it, though ſome writers entertained terrible apprehenſions of future miſchief invading the conſtitutions of thoſe who have been inoculated upon the new ſyſtem: had there been facts I have not the leaſt doubt but thoſe writers would have ſhewn great readineſs in proving and ſtating them properly, as arguments in favour of their declared opinions relative to this ſubject. All the inconveniences which I have been able to diſcover in ſuppreſſing the variolous eruption, are a temporary macies and waſting of the cellular ſubſtance attended with tremor and debility, a ſecondary and irregular fever preceded by a ſecond fermentation in the place of inſertion, great ſoreneſs of the arm, tumour and pain in the axilla, but ſcarce ever ſuppuration, eſpecially if purging has been uſed as judiciouſly as it ought to have been*.

But

* Theſe reaſonings which I ſubmit to the conſideration of abler judges, will obviate many of thoſe objections which have been raiſed againſt Inoculation. At a time indeed after a long ſeries of ſucceſs has eſtabliſhed the practice, one would little expect that any perſon ſhould be ſo hardy as to attack it;

But ſtill difficulties and untoward accidents as well as great anxiety will ever attend this practice. The intervention of ſome other unforeſeen diſeaſe may happen to diſturb the mind of the operator and indanger and even deſtroy the patient: An inſtance of this nature occurs in the following liſt of caſes, which impartiality and a deſire of putting

it; yet I am deſired to take notice of a pamphlet lately publiſhed under this title, "The Nature of Inoculation explained, and it's merit's ſtated." Printed for B. Law, in Ave-Mary-Lane, and J. Dale, at Coleſhill.

In the very firſt ſection of this performance, the author admits that the variolous matter is a virus *Sui generis*, and yet ſays that it contaminates the viſcid part of the blood and juices, which ſerves as a nidus wherein the variolous matter reſts: He then proceeds to argue that the Small Pox eſpecially the natural ſort is a ſalutary proceſs by which theſe viſcid juices are diſcharged, and not only ſo, but even acquired, and hereditary ſcurvy are at the ſame time by the action of the fever eliminated, nay, often exterminated. This good effect, he thinks, cannot be brought about by the new method of Inoculation, in which an imperfect depuration is attended with various miſchiefs. "So ſenſible I am (ſays he) of the "bad effects of imperfect depuration of tenacious acrid matter, "and eſpecially that which is tranſmitted, that I will venture "to declare, any diſorder may ariſe therefrom, even, from a "ſimple eruption on the ſkin, to the king's evil, cancers, con-"ſumption of the lungs, or the ſlow nervous fever, and atro-"phy; in which the ſubtle diſeaſed effluviæ attack and prey "upon the firſt principles of life." Theſe indeed would be formidable objections, if in any reſpect ſupported by facts; but as no evidence is produced to prove his aſſertions, I ſhall not enter into a controverſy the merits of which experience hath ſufficiently decided. I muſt refer the reader to the pamphlet itſelf, obſerving however in juſtice to the author that it is wrote with decency and an air of candour.

others upon their guard have induced me to publiſh, though I might eaſily have ſuppreſſed it.

On *Jan.* 31, 1769, ten patients of different ages and ſexes were inoculated all in the ſame manner and with the ſame freſh matter taken from the ſame ſubject upon the points of lancets: Theſe patients had been under a preparation for eight days, and taken two doſes of the *Pulv. Præpar.* according to *Dimſdale.* I kept an exact account every day of the various appearances and ſymptoms occurring in each, together with the mode of treatment, of which the following is an abſtract.

No. I. *Eliz. L.* aged 24: 1ſt day after the operation ſhe took a doſe of *Pulv. Præp. Dimſd.* which is a general rule in practice, and was obſerved in reſpect to all the other patients.—2. Wounds appear'd inflamed.—5. Inflammation ſpreads, edges riſe, breath fœtid; under which circumſtances it is proper to repeat the *Pulv. Præp.*—8. Axilla painful.—10. Head-Ach, pain in the limbs, chillineſs.—12. Eruption appears; allowed chicken and broth.—14. Puſtules riſe, throat ſore.—15. Puſtules begin to maturate, which was owing to the indiſcretion of this patient who determined to have a full eruption for which purpoſe ſhe was always creeping to the fire, and taking all opportunities of indulging warmth.—16. Maturation increaſes, but the cellular membrane is not inflated.—18. Eruptions begin to decline, tho' the axilla continues painful.—19. *Pulv. Præp.* and *Pulv. Purg.*—21. Ditto; the diſeaſe goes off favourably.

No.

No. II. *Mary H.* aged 22.—The 1ſt operation did not infect; ſhe was inoculated again with crude lymph taken from the wound of No. IV.—2d day wounds inflamed.—5. Inflammation ſpreads, edges riſe.—10. Pain in the head and chillineſs.—11. Better in conſequence of walking out.—12. Eruptions very few and favourable and the patient ſoon got well.

No. III. *Mary H.* aged 15.—The 1ſt operation failed in infecting; ſhe was inoculated again on *Feb.* 15. with crude lymph the ſame as No. II.—2d day, Wounds inflamed.—5. Edges riſe.—7. Pain in the head, axilla ſore.—8. Puſtules about the wound numerous and full, no other eruption, the ſymptoms ſlight and the patient ſoon well.

No. IV. *Mary H.* aged 9.—3d day, Wounds inflamed.—5. Edges riſe.—8. Feveriſh, with fœtid breath.—12. Eruption and Symptoms very ſlight.

No. V. *James B.* aged 4.—1ſt day, Sick and feveriſh.—2. Meaſles broke out.—5. Slow intermittent fever with cough, one wound quite cloſed, the other rather dubious in appearance.—6. Symptoms from the meaſles better.—12. A yellowiſh appearance in one of the inciſions, notwithſtanding which at the requeſt of his parents he was inoculated again with crude lymph.—13. A puſtule appears in the firſt inciſion, the patient feveriſh, breath fœtid--new wounds not viſible.—14. Fever continues, and the puſtule ſpreads.--15. Arm inflamed, and the variolous eruption obſerved.—16. Inflammation ſpreads with puſtules ſurrounding it.—17. Inflammation

and

and puſtules increaſe, cough from the meaſles becomes troubleſome, with hectic fever attending, he took the *Pulv. Febr. Specif. Mixt. Oleos.* made anodyne occaſionally.—18. Cough troubleſome, fever ſevere, the child cries and pines continually; ordered a linctus with Etxr. Cort. Peruv. nearly the ſame as that referred to * below.—19. Variolous eruptions very few and favourable, the fever continues.—20. Fever with loſs of ſleep and appetite, pain in the head; ordered a bliſter and glyſters of *Decoct. Cort.* occaſionally.—22. Feveriſh and reſtleſs.—23. and 24. Symptoms rather abated.—25. Fever returned with conſtant cough, the child much waſted and grew worſe every day.—30. Pineing and looſeneſs.—31. Bliſters to the arms.—32. No remedies prove ſerviceable.—38. The child died.

No. VI. *Richard H.* aged three years and a half.—5th day. Edges of the wounds riſe.—8. Fever and fœtid breath.—14. Eruptions maturate owing to too much warmth and indulgence in the arms of his mother.—16. Eruptions very ſore, but the cellular membrane not inflated; the patient ſoon got well.

No. VII. *Mary T.* aged three years and a quarter.—Nothing remarkable.—Diſeaſe very ſlight.

No. VIII. *Samuel C.* aged three years and a quarter.—Diſeaſe very ſlight.

* Vid. page 42.

No.

No. IX. *Elizabeth B.* aged two years (ſiſter to the patient marked No. V.) 1ſt day. After the inciſion feveriſh.—2. Meaſles appeared.—3. Wounds not viſible.—5. No appearance of infection, the ſymptoms from the meaſles abated.—On the 12th of *Feb.* ſhe was inoculated again with crude lymph. —2d day after the laſt operation, wounds inflamed. —5. Edges riſe and puſtulate.—8. Puſtules ſpread. —11. Arms very ſore.—12. Feveriſh.—14. Slight eruption which ſcarcely maturated.—18. Fever and pining and cough in conſequence of the meaſles.—19. Looſeneſs, ordered gentle reſtringents and anodynes.—24. Fever intermits.—26. Better to day, appetite and ſleep returned, ſlight fever towards evening.—27. Much better, and in a few days quite recovered.

No. X. *Hannah C.* aged one year and three quarters.—Diſeaſe ſlight.

In reſpect to the caſes marked No. V. and No. IX. I was from the firſt appearance of the meaſles juſtly apprehenſive of the danger which enſued: Nor could I poſſibly ſuſpect the approach of that diſeaſe as the children ſeemed to be in very good health the day on which they were inoculated. It was doubtful to me whether the eruption of the meaſles ſo ſoon after inoculation would not prevent the variolous infection, but the example mentioned under No. V. proves that the meaſles did not ſtop the progreſs of the ſmall pox; yet the late appearance of the infection does not in this inſtance confirm that prognoſtic of *Dimſdale* relative to the future

danger of the diſeaſe from this circumſtance, becauſe the Small-Pox was in reality in itſelf very ſlight and favourable, the death of the child being moſt ſurely occaſioned by the meaſles.

The uncertainty of infection we ſee evidently in ſome of theſe caſes; which leads me to obſerve, that the preference in reſpect to matter is due to the crude lymph taken from the place of inſertion, tho' in general I have found the dry matter on the lancet effectual. We find likewiſe that warmth and indulgence certainly contribute to the increaſe of the eruptions, a circumſtance of which even the moſt prejudiced favourers of the old method are now ſufficiently convinced.

But what ſhall we ſay to the effects of this cool regimen in reſpect to the natural Small Pox? Will it avail, or is it ſafe after the eruption appears? I muſt leave the deciſion of this queſtion to more enlarged experience, at the ſame time I am glad of the opportunity of publiſhing the following caſe, communicated to me by a phyſician whoſe abilities render his authority unqueſtionable: With this I ſhall conclude the preſent chapter, leaving the facts to ſpeak for themſelves, as needing no comment.

*Jan.* 30, 1769. "Mrs. ——. inclined to cor-
"pulent habit, was ſeized in the evening with
"ſlight ſhiverings, and pain in her head and back,
"had a reſtleſs night.—2d day Confined to her
"bed with an increaſe of her complaints; took
"ſome ſaline draughts and wine whey, ſuppoſing
"ſhe had taken cold; in the evening had a cordial

"given

" given her; and had again a very diſquiet
" Night.

3d.—1ſt of the eruption.—" In the morning,
" on attempting to bleed her, a ſmall eryſipelatous
" eruption was obſerved on her arms and neck;
" on which account the bleeding was omitted; her
" ſaline draughts were continued, and in the even-
" ing, in order to relieve the pain in her head and
" back, ſhe was ordered to bathe her feet and legs
" in warm water; which was continued till ſhe
" had frequent fainting fits.

2d.—" This day the eruption was increaſed over
" her face and her whole body, ſufficiently to aſ-
" certain the diſeaſe to be the Small Pox: She
" took a cordial draught with half an ounce of
" Tinct. Rhei, which procured her four ſtools:
" *Hodie Catamenia abundanter fluunt*; had great
" difficulty in breathing with great oppreſſion in
" her breaſt: The eruption increaſed on the whole
" body; very ſmall and copious on her arms and
" breaſt, but more diſtinct in her face.

3d. day of the eruption.—" The oppreſſion on
" her breaſt conſiderably increaſed, with great dif-
" ficulty to expectorate from the viſcidity of the
" phlegm: continued very languid and faint:
" confined to her bed the whole day.

4th day.—" The ſymptoms became very alarm-
" ing from the faintings and difficulty of breath-
" ing, with the great load of eruption.

5th.—" Was taken this morning out of bed and
" carried into a large room with the windows open;

" took a calomel bolus with a quarter of a grain " of Emetic Tartar, which vomited her twice, and " gave her three large purging ſtools; which pro- " cured great relief: drank frequently cold water " with Sp. Vitriol. Dulc. acidulated with a few " drops of the ſaid ſpirit. Had a good night, and " expectorated freely; her fever was totally re- " moved.

6th.—" Sat up the whole day, and walked fre- " quently into the large room with the windows " open; and drank cold water with the ſaid drops. " Took no medicine, and had again a very good " night.

7th.—" The appearances as favourable as be- " fore: free and copious expectoration without " any fever: took the calomel bolus again this " evening.

8th.—" The bolus not having procured any " conſiderable diſcharge, was repeated this morn- " ing in an increaſed quantity: which with leni- " ent opening medicine procured ſix large evacu- " ations by ſtool: much relieved, and had again " a quiet night.

9th.—" The eruptions on her face fully matu- " rated; her face ſwelled to a great degree; " all the appearances as favourable as could be " wiſhed; drank plentifully of cold diluting li- " quors acidulated as before: continued up the " whole day, and was frequently led about the large " room without any fire in it, and the windows " open:

" open: had two large ſtools this day from the " opening apozem.

10th.—" This morning the ſwelling of the face " was conſiderably abated, and the hands began to " ſwell without the acceſs of any ſecondary fever: " her regimen the ſame as before; and all the " ſymptoms as favourable as poſſible.

11th.—" The diſeaſe went on very favourably; " her feet began to give her great pain from the " number of puſtules and the thickneſs of the inte- " guments; was carried into the large room; had " a reſtleſs night from the pain of her feet; in " other reſpects very well.

12th.—" The ſymptoms as favourable as be- " fore; took this night twelve drops of Laudanum " on account of her feet; which procured her a " very good night; and ſhe waked very well in the " morning of the 13th day of the eruption.

## *Of internal Abſceſſes, particularly on the* Pſoas *Muſcle.*

IT is the office of a ſurgeon to diſtinguiſh properly incurable caſes as well as thoſe which admit of relief, that he may be able to form a juſt prognoſtic, and avoid being deceived by external appearances. Amongſt the juniors of the profeſſion care, attention, and ſtudy, muſt ſupply the want of experience, and for their inſtruction the following memoir is deſigned, explaining ſome circum-

ſtances of a diſeaſe which hath not hitherto been accurately deſcribed by medical writers.

Perhaps the general fatality of the *Pſoas* abſceſs, the impoſſibility of arriving at the ſource of it, and the inefficacy of medicines having been repeatedly experienced, are the reaſons which have deterred practitioners from writing about a caſe which they deſpaired of curing. Yet however irkſome and diſagreeable ſuch a taſk may be deemed, ſome uſeful remarks and inferences may be made to render our enquiries worth attention, and the ſubject in ſome meaſure intereſting to the reader.

We may with propriety divide internal abſceſſes into two ſpecies—*general* and *particular*—under the firſt title we are to range all thoſe collections of matter formed within the cavity of the Abdomen (for I intend not to ſpeak of the Thorax or of it's diſeaſes in this chapter) either from the inflamed ſurfaces of the contained viſcera, from the tranſuding fluids, from the intervening cellular ſubſtance, or the *Peritonæum*. This matter diffuſes itſelf very irregularly, and points externally in various parts as it is not confined in a cyſt; moſt frequently it appears in the moſt depending, tho' ſometimes from accidental adheſions of the *Peritonæum*, it may preſent itſelf higher up on the abdomen or wherever thoſe adheſions happen. The cauſe of this matter firſt forming is owing to a lax habit of body, and if we conſider the ample extent of the ſurfaces of the contained viſcera and containing membranes, we ſhall readily explain the reaſon why the quantity

quantity of matter is ſo very great and the conſequences of ſuch a diſeaſe generally ſo fatal to the patient. From the ſame conſideration the difference in reſpect to danger between an external and internal abſceſs is evident*; the former we know is circumſcribed and confined, and admits of any eaſy cure, the latter ariſes from ſources which we cannot reach, the powers of medicine and the ſkill and dexterity of chirurgical operation proving equally ineffectual as to a cure.

The effects and conſequences of *general* internal abſceſſes muſt be various and uncertain, as the ſources of them are ſo deep and extenſive. In regard to the *particular* ſpecies of theſe abſceſſes, they take their diſtinctions from the organs moſt materially affected: For inſtance the liver, and the meſenteric glands, and other viſcera; but the explanation of theſe comes not under our preſent purpoſe.

* In ſome large abſceſſes formed externally on the lower part of the abdomen, there is at firſt a difficulty in determining whether they do or do not communicate with the Cavity. An inſtance of this kind occurred very lately in a man of a corpulent habit: The ſymptoms in ſome degree were equivocal, eſpecially in regard to the pain of the back, and the diſcharge after opening the tumour was very copious. But finding afterwards a neceſſity of enlarging the inciſion to trace the ſource of the matter, it appeared to ariſe from the cellular membrane. The ſeat of it however lay very deep, and the caſe for a long time continued doubtful; but as no matter flowed from the cavity of the abdomen, a cure was at length effected by proper dreſſings, internal medicines, and artful bandage.

The

The diſeaſe commonly called the *Pſoas* abſceſs belongs to the *general* ſpecies of internal abſceſſes: For as to the meer name, it is by no means abſolutely ſignificative of the ſeat of the diſeaſe: for this appellation is given, not becauſe the matter is originally formed on the *Pſoas*, but becauſe it frequently is inſinuated along the courſe and direction of that muſcle, and conſequently by that means drops into the moſt depending part of the cavity of the abdomen.

The cauſe of the *Pſoas* abſceſs remains too obſcure to be exactly aſcertained: We may ſay in general that it ariſes from a laxity of fibre, an expreſſion which will ſeem to many vague and unſatisfactory. Indeed it is equally difficult to point out the origin of many other internal diſeaſes eſpecially chronical ones. No wonder then, that in this caſe of the *Pſoas* abſceſs wherein the matter is collected from ſo large a cavity as the *Abdomen*, and from ſurfaces ſo ample and extended as the contained viſcera as well as the cellular ſubſtance and ſurrounding membranes, we ſhould be at a loſs how to determine preciſely the ſource of the diſeaſe when ſo many parts are affected. We know that it does not ariſe from any particular inflammation. How then muſt we account for it? Shall we admit the poſſibility of the exhaling perſpirable fluids in ſeveral cavities of the human body being convertible into *pus?* We are indeed told by the moſt able phyſiologiſts that the coagulable lymph ſecreted within the thorax, the pericardium,

dium, and the abdomen, (tho' of infinite uſe in itſelf) proves very pernicious when the ſecretion of it exceeds the neceſſary quantity. This ſuperfluity then is the cauſe of diſeaſe and may poſſibly degenerate into matter, which being confined, frequently becomes putrid and occaſions many miſchiefs by it's abſorption.

Allowing this generation of matter to be the probable cauſe of the *Pſoas* abſceſs, we next come to deſcribe with rather more certainty, the ſymptoms.

The grand *pathognomonic* ſymptom is a pain in the loins or back, attended with ſhiverings and heat alternately. The ſpace of time between the firſt appearance of theſe ſymptoms and the formation or pointing of matter externally varies in different caſes. The tumour itſelf advances very ſlowly as it is not of the plegmonoid ſpecies, and appears irregularly ſometimes in the groin, ſometimes lower, and frequently behind under the *Glutæi* muſcles affecting all the neighbouring bones with a *Caries*: In this laſt circumſtance it frequently happens, that the matter forms ſeveral abſceſſes which burſt of themſelves and leave as many fiſtulous orifices thro' which iſſues a thin diſcharge, and if we introduce a probe into any one of theſe we ſhall often diſcover part of the os ilium or ſacrum to be foul. Many other ill effects happen internally by the matter preſſing upon or affecting the contents of the *Pelvis*, for inſtance, irritation of the neck of the bladder and the rectum occaſioning pain in making

making water and a diarrhæa. Add to theſe miſeries all the miſchiefs which uſually attend abſorption of matter, particularly hectic heats, intermittent fever, thirſt, macies, and an unhealthy aſpect. Inſtances have been known in which the matter has inſinuated itſelf along the courſe of the great veſſels and formed a tumour in the thigh, the nature of which is diſcovered by the above-mentioned previous ſymptoms. Nor muſt we omit obſerving, that from the ſituation of the tumour over the direction of a large artery a pulſation is communicated which is very fallacious and is often miſtaken for an aneuriſm*.

As matter from the *Pſoas* abſceſs may poſſibly drop down into the thigh, we muſt not from the appearance confound this caſe with another ſomewhat ſimilar in this reſpect tho' entirely different in it's nature and ariſing from a different ſource. I

* A tumour of this kind I ſaw ſome time ago, which appearing in the loins directly upon the courſe of one of the iliac arteries, had a remarkably ſtrong pulſation, inſomuch that ſome of the beſt ſurgeons in *England* pronounced it to be *aneuriſmatical*, and it was treated accordingly. *Alexander Monro*, ſenior, had ſome doubts about it, and adviſed puncturing with a fine needle in order to diſcover the contents: An ingenious propoſal, tho' perhaps had it been tried, the reſult of the experiment might not have proved deciſive, becauſe Dr. *Hunter* tells us that the diſcharge juſt before the rupture of an aneuriſm is thin and ichorous. The tumour at length broke of itſelf and inſtant death was expected, but the contents proved in a few days that the caſe was no other than a large abſceſs: Yet the ſource of matter being internal the patient grew hectic, conſumptive, and after ſome time died tabid.

mean

mean the abſceſs formed in the *Acetabulum*. Indeed the previous ſymptoms are ſufficiently diſtinct, ſo as ſcarcely to admit a poſſibility of confounding the diſeaſes. But I muſt obſerve that both of them do generally proceed from a ſcrophulous humour in the habit affecting the glandular ſyſtem. In both the matter is frequently abſorbed and tranſlated to ſome of the nobler organs; but by what means this tranſlation is effected from one part to another quite remote, is a queſtion not yet clearly explained. The fact however is inconteſtable, as many inſtances have been proved from diſſections. We have often ſeen in opening bodies which have died after amputations, matter formed in the lungs from an abſorption in the ſtump. In all caſes of this nature whether in large wounds, ulcers, or abſceſſes from whatever cauſe, if the quantity of matter diſcharged is leſs than uſual and eſpecially if the decreaſe is ſudden, and a fever enſues, we have reaſon to apprehend fatal conſequences; for matter never changes it's ſeat without injuring the patient *. In

* Having mentioned the abſceſs of the *Acetabulum*, I am led to remark, that when the matter appears in the form of a tumour in the thigh, it is difficult to determine the propriety of opening that tumour; and in this reſpect again this diſeaſe reſembles the *Pſoas* abſceſs.——Upon examining the body of a patient who died in conſequence of an abſceſs formed from the acetabulum which had been opened, I obſerved the right lobe of the lungs entirely ſuppurated and deſtroyed, the ſurfaces of the abdominal viſcera adhering to the omentum and peritonæum, the meſenteric glands enlarged and diſeaſed, and the bed where the matter was firſt formed

In large abſceſſes (as juſt before-mentioned) we are often led into errors on account of the ſimilitude they bear from communication with blood veſſels, to aneuriſms. This deception now and then prevails even in tumours ſituated in the extremities; Mr. *Bayford* very judiciouſly ſays †, "It is certain, that the meer pulſation of a part "muſt ever be deemed equivocal, as that ſo often "happens without any manifeſt diſeaſe in the ar-"terial ſyſtem." I have in many caſes profited from this kind of caution, being induced to examine with care and circumſpection the true ſtate of ſeveral tumours which perhaps might have eſcaped or deceived a leſs vigilant enquiry. Among theſe caſes I beg leave to mention one, which under the appearance of an aneuriſm betrayed a cancerous nature, the explanation as well as the opinion relative to this tumour given by me may be ſeen in the note ‡. It may be proper to add, that the patient died cancerous.

To

formed quite dry; the head of the os femoris carious and the ſurrounding cartilage as well as the gland in the cavity of the joint corroded.——When upon opening an abſceſs of a ſuſpicious nature ſituated near the crural veſſels, we diſcover any diſcharge or coagulum of blood we muſt be very careful of medling with the eſchar (if a cauſtic has been uſed) and eſpecially with the coagulum itſelf, but leave the ſeparation entirely to nature. Thoſe who have neglected theſe cautions have often deſtroyed their patients.

† Vid. Medical Miſcellany, page 132.

‡ "I have examined Mr. S——'s leg with the utmoſt "attention, and from the preſent appearance of the tumour, "and from the hiſtory of the caſe I judge it to be of a can-

"cerous

To the foregoing obſervations on the *Pſoas* abſceſs deduced from facts, it will be unneceſſary to add a great number of caſes, the appearances and the

" cerous nature. For he complains of a pritching ſhooting " pain, the tumour is knotted, hard, and unequal, the ten- " dons of the gaſtrocnemius muſcle contracted, the ſore " where the ſkin is broke, from the protruſion of the fleſh " reſembles a cancerous ſore, and the diſcharge is frequently " thin and acrid. All theſe are diagnoſtic marks of a " cancer. It happens indeed from the preſſure of the tumour " upon an artery that a pulſation is communicated to it " which may have led ſome into a ſuſpicion of it's being an " aneuriſm. But in no other ſymptom does it correſpond " with that diſeaſe. I wiſh it was an aneuriſm rather than " what it appears to me to be, becauſe then the amputation " would be proper as the blood would not be ſuppoſed taint- " ed with acrimony, and the ſtump might be healed without " apprehenſion of future miſchiefs.

" The ſore it ſeems has bled, which is another character- " iſtic of a cancer; for if it had been an aneuriſm, I ſhall " ſuppoſe the affair would then have been decided. Beſides " from the whole appearance of the limb, the ſores, the " tubercles, and indeed the aſpect of the patient, I am more " convinced in my opinion. It may indeed happen from " the corroſion of the matter, that ſome blood veſſel con- " tiguous to it may be divided, and a falſe aneuriſm pro- " duced, requiring the ſame immediate neceſſity of amputa- " tion; but at preſent that danger ſeems remote.

" From the whole of the caſe as it appears to me, I would " adviſe by a milk diet, and other means to correct the " acrid humours, and by emollient poultices to ſoften the " tumour;—till the hardneſs is reduced I ſhould think either " inciſions or amputation improper—the latter nothing can " juſtify except the rupture of a blood veſſel or violent in- " creaſe of pain, and even then the event or the conſequences " might be unfortunate. " Had

the event being in moſt of them ſimilar. Some linger a long time under their miſeries in a conſumptive ſtate; ſome periſh ſpeedily in conſequence of a mortification of the parts, and a deluge of matter.—In others the diſeaſe appears and diſappears, remits and returns, keeping the patient in the moſt uncomfortable ſuſpence. In all, the remedies preſcribed are of little ſervice, *opium* excepted, which muſt always be uſed in proportion to the urgency of pain and diſcharge.

A boy aged 14 was taken into St. *George*'s hoſpital, with an abſceſs pointing in the groin, and ſeemingly ready to burſt through the ſkin: However it was not opened, and after a conſiderable time it diſappeared and formed itſelf again on the contrary part in the other groin. It was then opened, and the boy remained in a lingering ſtate ſeveral weeks with a great diſcharge from the wound. But at length, the quantity of matter decreaſing, the wound cloſed up and he was ſent out of the hoſpital. About two months after this he came again with the ſame complaint, but as he had a very bad hectic cough it was not thought proper to admit him, and in a ſhort ſpace of time he died conſumptive.

"Had I any reaſon to think Dr. *Stork*'s boaſted cicuta as "effectual as he ſay it is, I would here recommend it; how-"ever in the poultice either the bruiſed herb, or the ex-"preſſed juice ſhould be added—of it's internal uſe I am "doubtful. For medicines I adviſe, gentle aperients, and "opiates occaſionally, with milk diet and ſarſa decoc-"tion."

*E. A.*

*E. A.* a girl about twenty years of age came into the hoſpital with a large tumour under the gluteus muſcle: upon opening it a prodigious quantity of ill-conditioned fœtid matter was diſcharged, and upon examining with the probe the ſpine of the *Ileum* was found to be carious. In ten days after the operation ſhe died more ſuddenly than was expected *.

A man came into the hoſpital (aged about 50) with a tumour that at firſt appeared of a doubtful nature as it was ſituated near the abdominal ring and reſembled a rupture; but it was ſoon diſtinguiſhed from that diſeaſe, by it's not receding on preſſure, or when the patient lay down a conſiderable time. It was likewiſe attended with great pain in the loins, and in the external part where it pointed: For this reaſon emollient fomentations and cataplaſms were applied every day during the ſpace of ſix weeks. By theſe means the tumour advanced more and more with a perceptible fluctuation of matter, the ſource of which was not ſo evident from it's appearance, as from the previous ſymptom of the pain in the loins, as well as the ſlow advance of the abſceſs. All the time the

* Upon examining the body I found both the left *Pſoas* and *Iliacus internus* muſcles diſeaſed, and in a ſtate of mortification. There was a large quantity of matter lying amongſt the cellular ſubſtance in the lower part of the *Abdomen*. The *Peritonæum* was inflamed and indurated, and the inteſtines ſeemed ſphacelated in ſeveral places. The ſpine of the *Ileum* was carious, as were likewiſe two of the proceſſes of the *vertebræ lumborum*. The external wound communicated with the *Pſoas* and was in a mortified ſtate.

ſwelling

ſwelling increaſed in ſize, the patient ſeemed declining in his health; and when the matter was almoſt ready to burſt through the ſkin Mr. *Hewitt* thought proper to open the abſceſs, and there came away about a quart of well concocted pus. A little time determined the certainty of it's being a *Pſoas* abſceſs, by the profuſeneſs of the diſcharge attended with hectic ſymptoms, and a colliquative looſeneſs, which had indeed been troubleſome from time to time during his illneſs, occaſioned probably by an abſorption of matter. It was obſervable in this caſe as well as in ſeveral others of the ſame nature, that the wound generally looked uncommonly clear and well: An appearance peculiar to the *Pſoas* abſceſs, eſpecially when the tumour has been ſuffered to ripen ſufficiently, which obſervation makes againſt the practice of opening any tumour in a crude ſtate, even ſuch as are deemed critical. As to the propriety of opening the *Pſoas* abſceſs, we may ſay with a very eminent ſurgeon, that whether we perform the operation or not, we do wrong, becauſe the caſe itſelf admits of no one good meaſure being taken. But however the rules of ſurgery call upon us to open the abſceſs when ſufficiently pointed.—As to our patient he lingered about fifteen days after the operation and then died †.

A young

† On examining the body I found a great quantity of matter lodged on the right *Pſoas* muſcle, which daily diſcharged itſelf through the external wound. On the left *Pſoas* there was likewiſe a very large abſceſs formed though it

A young man applied for advice concerning a tumour which was ſituated low in the groin, with a peculiar odd appearance as if it was interſected and divided into two diſtinct bags of matter. From the ſymptoms the caſe was judged to be a *Pſoas* abſceſs. The patient was adviſed to go into the country, and to keep himſelf quiet and regular with proper nouriſhing and rather ſubaſtringent diet. In this caſe no application was ordered to the part, to avoid doing any thing which might irritate, or tend to increaſe the quantity of matter. When the tumour ſhould be ripe the knife or cauſtic were to be uſed indifferently, taking care to make a ſmall opening at the depending part; the whole chance of recovery reſting upon the habit and ſtrength of the conſtitution of the Patient. This caſe came under the inſpection of Mr. *Middleton* and Mr. *Hawkins*.

It will readily occur from knowing the ſeat of the *Pſoas* abſceſs that there can be but very little dependence or ſtreſs laid upon any particular mode of dreſſing or application to the wound. Tents are exploded as uſeleſs and even pernicious, except

it had not pointed externally; the matter of this abſceſs was collected in a kind of ſac formed by the peritonæum and adhering cellular membrane very much thickened. It extended quite up to the kidney (which was not injured however, being guarded by the ſurrounding fat) and low down likewiſe in the pelvis, and in proceſs of time would have made it's way externally by the ſide of the *os ſacrum*, as often happens. The matter in this ſac was in a crude ſtate. There was an univerſal adheſion of the omentum to the peritonæum; the thoracic viſcera were ſound.

now

now and then they may ſerve to plug up the matter at one place, that it may be made to point more conveniently in another. Injections of any kind (though they bid faireſt to penetrate to the very ſeat of the abſceſs) are of little or no ſervice: If they are adviſeable in any circumſtance, it is in the caſe of fiſtulous orifices, into which the aq. calcis impregnated with a ſmall portion of vitriol may be injected every day. We are equally deficient likewiſe in reſpect to the internal regimen and treatment; we may, it is true, preſcribe ſometimes to the ſymptoms with advantage, though not to the caſe in general. Lime water, aſſes milk, and the cortex peruvianus are uſed alternately. I frequently order the following decoction, and it ſeems to agree very well:

℞ Fol. Roſar. rub.
—— Balauſt.
Cort. Granat.
—— Cinnamon. aa. ʒi. coq. in Lact. vaccin. recent. ℔i inter coquend. infund. aq. font. calid. ℔i gradatim, colatur. ℔i add. ſacch. albiſſ. qs. fit pro potu.

One of the moſt favourable caſes which I have ſeen of the *Pſoas* abſceſs is the following:

*A. J.* a young man at the age of 25, was firſt ſeized with very ſevere pains in the loins and back in *January*, 1766.—Theſe pains ſometimes remitted, and were followed with ſhivering and heat alternately for a long time. In *Auguſt* 1767, he firſt perceived a ſwelling in the groin about the ſize

ſize of a pullet's egg, this tumour became an abſceſs and pointing ſufficiently it was opened by inciſion the latter end of *September* in the ſame year. A pint of well concocted pus came away immediately, and matter continued flowing from it in uncertain quantities and at different times for the ſpace of two months. It ſoon after healed up, but broke out again in the ſame place in 1768.—Another abſceſs broke from behind juſt above the brim of the pelvis, and both diſcharged matter at different times. Several medicines were tried upon this patient but without any good effect, and at length I reſted the whole upon *opium*, taking care to remedy his habitual coſtiveneſs by gentle aperitives occaſionally. He began to take *opii gr.*1 *omni nocte* in the beginning of the year 1768, which medicine was of the greateſt ſervice both in abating pain and in checking thoſe profuſe ſweats which uſed to waſte him. In the preſent year 1769 the doſe of opium is increaſed *to two grains*; the patient is upon the whole much better though ſtill drooping, and I have reaſon to think from the pains in his loins and limbs which neither opium or time can entirely remove, from his hectic look and other ſymptoms that the matter will collect again.—However at preſent (*May* 20, 1769) he ſeems tolerably well, and the caſe as favourable as he can expect.

Before I conclude this article it may be neceſſary to repeat the caution in reſpect to large abſceſſes on the abdomen.—Theſe ſometimes have been miſtaken for internal abſceſſes, and indeed ſome

of them from the vaſt quantity of matter contained, and from the deep ſeat of that matter, may deceive even an experienced practitioner. As to the viſcera they are very rarely affected, at leaſt ſo far as to be diſcovered by any external tumour, except in ſome diſeaſes of the meſenteric glands of a doubtful appearance, and when abſceſſes do form in them, the concomitant ſymptoms widely differ from thoſe which demonſtrate the *Pſoas* abſceſs.

It is now time to finiſh this ſubject: We are always glad to turn our eyes from a dreary and melancholly proſpects. Such are the circumſtances of the *Pſoas* abſceſs, a diſeaſe not very difficult to be diſtinguiſhed though incapable of being cured: Yet it is a ſurgeon's duty to exert his utmoſt endeavours, and if all means fail of ſucceſs, it ſtill remains in his power to alleviate, at leaſt by the tender offices of humanity, thoſe miſeries which gradually preying upon life baffle ſkill, and perplex experience.

## *Of Compound Fractures.*

IN the ſtudy of every ſcience and in the practice of every art it is indiſpenſably neceſſary to have recourſe to the firſt principles upon which each art or ſcience is founded. Hence appears the great uſe of anatomy, eſpecially in caſes of chirurgery, becauſe an accurate knowledge of the parts and veſſels injured muſt be attained before we can undertake to remedy thoſe injuries, or form any certain prognoſtic concerning the event of them.

This

This ſentiment enforced by experience, and repeated by almoſt every author, ought always to influence the mind. And in no one point of practice is it of more importance than in fractures, which admit of ſuch infinite variety and are attended with ſo many difficulties that the oldeſt and moſt expert ſurgeons are frequently at a loſs how to proceed. In theſe caſes therefore our reputation and ſucceſs in a great meaſure depend upon our underſtanding very clearly the ſtructure, uſes, and connexions both of the bony fabric and of the muſcles and ligaments, that in all exigencies we may be able to foreſee and to form a judgment of thoſe various miſchiefs which happen from fractures and diſlocations. When we are conſidering the probability of a fractured bone uniting, it is requiſite that we ſhould know the nature of Offification, how much that property differs in young and old ſubjects, and how far it may be affected or retarded by ſome peculiar acrimony in the habit of the patient. In regard to the particular arrangement, and the deſcription of fractures I refer to thoſe ſyſtematical authors who have wrote profeſſedly upon the ſubject, obſerving however that there is a material defficiency in all of them; which is not to be wondered at, when we conſider how extremely difficult it is to point out with exactneſs and preciſion all thoſe intricate, various, and uncertain circumſtances attending theſe caſes; inſomuch that the moſt approved rules and obſervations will never be ſufficient to direct us abſolutely, the habit of different patients being too

much involved in the queſtion. For after all we muſt be obliged to act in many caſes, from immediate intuition as it were, the neceſſity of taking our reſolutions not allowing us time duly to examine and compare all the ſymptoms which different accidents preſent to us, or to conſider deliberately the conſequences.

Of all difficulties the moſt important is to determine the propriety and neceſſity of amputation: On the one hand it is dreadful to take off a limb, and on the other it is inexcuſeable to ſuffer a life to be loſt by deferring that operation. Surgeons are frequently perplexed and differ very much in deciding this point. If indeed we are to believe Monſ. *Bilguer* * ſurgeon-general to the *Pruſſian* Armies, amputation is ſcarcely ever neceſſary; even under ſome of the moſt deplorable circumſtances of gun-ſhot wounds when the joints are hurt he forbids it, at leaſt he perſuades us to avoid the operation. But I fear that he carries this notion too far, which every man is apt to do who writes merely to eſtabliſh a new or peculiar doctrine, though it muſt be confeſſed his book affords many uſeful cautions.

Many circumſtances concur to perplex our judgment in deciding this capital point. As to the meer operation it reduces every thing to one certain principle, and puts an end to all difficulties and doubts in reſpect to the nature of the fracture,

* Vid. A diſſertation on the inutility of amputation of limbs. By Monſ. *Bilguer*. Tranſlated from the Latin.—Printed for R. *Baldwin, Pater-noſter-Row.*

for

for it is too late to reaſon after the limb is taken off. But then the apprehenſion of future miſchiefs, and the impoſſibility perhaps of doing to-morrow what we heſitate in doing to day, are queſtions very important and intricate, which neither precepts or examples can clearly determine. We have ſeen inſtances of ill ſucceſs from inſtant amputation, and likewiſe fatal conſequences from omitting it. Caſes ſeldom are exactly alike, and conſtitutions infinitely vary, ſo that it would be improper to attempt in one what might ſafely be atchieved in another. There are upon record ſurprizing accounts of the renovation of bones, and of limbs dreadfully ſhattered being reſtored contrary to the expectation of the ſurgeon who has perhaps adviſed amputation to which the patient has refuſed to ſubmit. Yet if ſome have been accidentally preſerved by their obſtinacy, many have periſhed by it. I wiſh it was in my power to write with more preciſion upon this important ſubject, but as I acknowledge the impoſſibility of laying down any certain rule for myſelf, I ſhall not preſume to attempt it for others.

Nor is there much intelligence to be obtained from the moſt eminent authors. If we conſult *Parey*, *Du Verney*, *Wiſeman*, *Heiſter*, and others, we ſhall not find ſo much ſatisfaction as we might expect from men of their experience and abilities. Either they have overlooked the ſubject or have obſerved the extreme difficulty of explaining it in the manner they might wiſh. They ſpeak in general terms only, and we are left at laſt to be guided by

by our own experience according as the different circumſtances of the accident appear. Mr. *Pott* indeed hath in a great meaſure ſupplied this deficiency in former authors, in an excellent work * lately publiſhed, and as it is by much the beſt performance on this ſubject that has yet appeared, I do moſt earneſtly recommend it to the peruſal of all ſurgeons, and ſhall quote a few paſſages applicable to my preſent purpoſe.

"I uſe (ſays Mr. *Pott*) the term compound fracture in the ſenſe in which the *Engliſh* have always uſed it, that is, to imply a broken bone complicated with a wound.

"In this kind of caſe the firſt object of conſideration is, whether the preſervation of the fractured limb can, with ſafety to the patients life, be attempted; or in other words, whether the probable chance of deſtruction from the nature and circumſtances of the accident, is not greater than it would be from the operation of amputation. Many things may concur to make this the caſe. The bone or bones being broken into many different pieces, and that for a conſiderable extent, as happens from broad wheels, or other heavy bodies of large ſurface, paſſing over, or falling on ſuch limbs; the ſkin, muſcles, tendons, &c. being ſo torn, lacerated, and deſtroyed, as to render gangrene and mortification the moſt probable and moſt imme-

* Some few general remarks on fractures and diſlocations, by *Percival Pott*, F. R. S. and ſurgeon to St. *Bartholomews*'s hoſpital.

diate

diate conſequence; the extremities of the bones forming a joint, being cruſhed, or as it were comminuted, and the ligaments connecting ſuch bones being torn and ſpoiled, are, among others, ſufficient reaſons for propoſing and for performing immediate amputation. Reaſons, which (notwithſtanding any thing that may have been ſaid to the contrary) long and reiterated experience has approved, and which are vindicable upon every principle of humanity, or chirurgic knowledge.

"When a ſurgeon ſays, that a limb which has juſt ſuffered a particular kind of compound fracture, ought rather to be immediately cut off, than that any attempt ſhould be made for its preſervation, he does not mean by ſo ſaying, that it is abſolutely impoſſible for ſuch limb to be preſerved at all events; he is not to be ſuppoſed to mean ſo much in general; though ſometimes even that will be obvious; all that he can truly and juſtly mean is, that from the experience of all time, it has been found that the attempts to preſerve limbs ſo circumſtanced, have moſt frequently been fruſtrated by the death of the patients, in conſequence of ſuch injury; and that from the ſame experience, it has been found, that the chance of death from amputation is by no means equal to that ariſing from ſuch kind of fracture.

"Every man knows that apparently deſperate caſes are ſometimes cured; and that limbs ſo ſhattered and wounded, as to render amputation the only probable means for the preſervation of life,

life, are now and then ſaved. This is an uncontroverted fact, but a fact which proves very little againſt the common opinion, becauſe every man of experience alſo knows, that ſuch eſcapes are very rare, much too rare to admit of being made precedents, and that the majority of ſuch attempts fail*.

" This conſideration relative to amputation is of the more importance, becauſe it moſt frequently requires immediate determination; every minute of delay is in many inſtances to the patient's diſad-

* The Baron *Van Swieten*, writing as many others have done, that is, theoretically on ſurgery, adviſes us, in the caſe of very bad compound fracture, which may moſt probably require amputation, to defer the operation, until we have tried the force of antiſeptic fomentations and applications of like kind for two or three days; and this opinion and advice he builds, in ſome meaſure, on a remarkable ſucceſs of *La Motte*, in a ſeemingly deſperate caſe, of a man's leg maſhed by the wheel of a heavy carriage.

That *De La Motte*'s patient eſcaped, I make no doubt, becauſe he has ſaid ſo; but the ſurgeon ſhewed much more raſhneſs in attempting to ſave ſuch a limb, than he would have done in the amputation of it, the operation would have been the more juſtifiable practiced. With regard to the Baron's advice, to ſtay two or three days, I take the liberty to add, that if you do that, ſtay ſeveral more, for at the end of that time (I mean two or three days) the patient will have very little chance indeed from the operation, much leſs than he would have had at the time of the accident.

I ſhould be very ſorry to be thought a patron or an adviſer of raſhneſs or cruelty; but in what I have here ſaid, I believe I ſhall have every man in the profeſſion, who has either true humanity or ſound judgment founded on experience, on my ſide.

vantage

vantage, and a very ſhort ſpace of time indeed, frequently makes all the difference between probable ſafety and fatality. If theſe caſes in general would admit of deliberation for two or three days, and during that time ſuch circumſtances might be expected to ariſe, as ought neceſſarily to determine the ſurgeon in his conduct, without adding to the patient's hazard, the difference would be conſiderable; the former would not ſeem to be ſo precipitate in his determination, as he is frequently thought to be, and the latter being more convinced of the neceſſity, would ſubmit to it with leſs reluctance. But unhappily for both parties, this is ſeldom the caſe; and the firſt opportunity having been neglected or not embraced, we are very frequently denied another. Here therefore the whole exertion of a man's judgment is required, that he may neither raſhly and unneceſſarily deprive his patient of a limb, nor through a falſe tenderneſs or timidity ſuffer him to periſh, by endeavouring to preſerve ſuch limb. Some degree of addreſs is alſo neceſſary upon ſuch occaſion, in order to convince the patient that what ſeems to be determined upon haſtily and with precipitation, will not ſafely admit of longer deliberation."

Our ingenious author next proceeds to give directions for the treatment of compound fractures, recommending in theſe as well as ſimple ones a flexed poſition of the limb. This improvement which overturns the old ſyſtem of practice ought to be adopted for the ſake of the ſuffering patients,

but I am afraid that this like other innovations will not be received ſo readily and ſpeedily as might be wiſhed. There may, it is true, happen caſes which on account of the ſituation of the external wound will not admit of being placed according to Mr. *Pott*'s rule: but in general I make no doubt of it's propriety and uſefulneſs, and am ſo far convinced by the reaſonings of this able ſurgeon that for the future I ſhall follow his directions in private practice and in the infirmary. As to the particular obſervations relative to the management of fractures, I refer to the book itſelf which coming from ſo great an authority will have better effect than any remarks of my own, though I muſt beg leave to offer ſome opinions which may tend to illuſtrate the ſubject.

It hath been obſerved by ſome ſurgeons of eminence, that when amputation is deemed neceſſary in compound fractures, the operation ſucceeds better in thoſe caſes wherein ſuppuration has appeared in conſequence of delay by keeping on the limb, becauſe, they ſay, the blood being reduced to ſuch a ſtate as to ſeperate matter habitually, digeſtion becomes more eaſy in the ſtump afterwards; whereas in ſudden accidents happening as they often do in full and plethoric conſtitutions, when the operation is immediately performed, the tenſion, inflammation, ſpaſms and other ſymptoms, are much worſe. This argument appears plauſible enough, but is liable to ſome very material objections. In the firſt place, when the joints and ligaments have been

been injured, there ſucceeds ſuch a train of dangerous ſymptoms as renders it improper to wait for ſuppuration, and even induces a mortification. And again, admitting the contingency of matter forming, and the firſt fever from the violence of the accident ſubſiding, will not amputation excite new inflammation? May not the wound or contuſion have already affected ſome of the adjacent nerves in ſuch a degree as to occaſion the neceſſity of immediate diviſion in order to prevent the fatal effects of ſpaſms and irritation? Theſe conſiderations will rather urge us to diſpatch, eſpecially when the limb is abſolutely condemned, and we wait not for any favourable alteration but only for the appearance of matter, and are endeavouring to lower the patient.

When amputation is judged improper and we agree to attempt ſaving the limb, numerous difficulties and miſchiefs muſt be expected to enſue requiring all our ſkill and diligence to obviate the ill effects of them. The ſymptoms as they ariſe ſufficiently indicate what remedies ought to be applied. For pain, and ſpaſms, and delirium, *opium* muſt be given, not in ſmall doſes as common forms and a practice too timorous have preſcribed, but in ſuch quantities and ſo often repeated as to produce the deſired effect a total ceſſation of the ſymptoms. One grain every hour and ſometimes two grains are neceſſary. Along with this medicine we muſt enjoin plentiful dilution, and take care to keep the body moderately open. Bleeding and the antiphlogiſtic regimen are objects not

to be neglected. Upon the firſt examination of a compound fracture ſome doubts may poſſibly ariſe concerning the propriety of dilating the wound. Some practitioners are very cautious in uſing the knife conſidering the integuments and muſcles as the natural compreſs to the bones, and not to be divided unleſs upon the moſt preſſing occaſions: Theſe chooſe to wait till matter is formed and the abſceſs directs the inciſion. Others prefer bold openings to ſet the bones free and to prevent the poſſibility of matter lodging at all. I have moſt frequently thought proper to follow the practice of the former.

And here I muſt obſerve that a large quantity of matter forming or lodging in the wound is one of the principal inconveniences attending compound fractures: For as long as this flows profuſely there is no probability of the generation of callus or of union in the bone. To remedy this evil we muſt make proper inciſions to drain off the matter, carefully obſerving the poſition of the limb that theſe drains may be depending. The beſt time for making theſe inciſions is when the tenſion and inflammation are abated, and the *cuticula* appears relaxed, (the ſureſt indication for uſing the knife): We muſt likewiſe give the bark freely to ſtrengthen the fibres and to correct the diſcharge. In reſpect to the formation of callus various difficulties occur. Inſtances have happened wherein unfortunately for the patient and for the reputation of the ſurgeon the broken bone has never

never united at all*. In ſome the callus forms very irregularly requiring great care and equal preſſure to prevent deformity. It may be aſked whether the callus ſhoots more expeditiouſly in conſequence of the end or points of bones being ſawed ſmooth†; that it does ſo, is a general opinion which induces practitioners to be very ſollicitous in making the extremities of bones as even as they can. But however I muſt confeſs that I have met with great and ſometimes inſuperable difficulties in attempting to ſaw off the points of bones, and am convinced that the directions inſiſted upon in theſe caſes, though very ſpecious, are not always practicable or ſafe; and that it is much better to truſt to future exfoliation, than by unneceſſary violence in handling and jarring the bones under a pretence of ſawing them, to run the riſk of ex-

* There is now in this town a maſon aged 50, who 20 years ago had a compound fracture of the os humeri about a hand's breadth below the head of the bone. Notwithſtanding proper care and treatment the bone would never unite: but the external wound healing, a kind of joint was formed in the ſpace between the fractured extremities, which being covered with callus the ſame as with cartilage is capable of free motion in all directions. The muſcles act as ligaments, and the man can raiſe and carry a very conſiderable weight with that arm, labouring at his trade as uſual. The ſight is curious, and I wiſh he could be ſeen by the profeſſors of anatomy in the metropolis.

† What becomes of the oſſific juice from the extremity of a bone after amputation? We ſee no traces of it notwithſtanding the end is ſawed as ſmooth and even as poſſible.—Perhaps the diſcharge in the wound waſhes it away, as it does in compound fractures.

citing

citing pain and irritation: Nor have I yet ſeen an inſtrument of power ſufficient to anſwer all the purpoſes which ſurgeons would have us attempt.

Some further remarks occur relative to that deluge of matter which forms in compound fractures, and abſorption and the conſequential miſchiefs which ariſe from it. We frequently obſerve a putrid heat, fever, and diarrhea affecting the patient terribly by fits, and preventing every endeavour to unite the bone: For we muſt not expect that callus can be generated while the circulation is diſturbed, the ſecretion of all nutritious juices being ſuſpended till the blood is able to clear itſelf from foreign matter. But how are we to prevent this abſorption? I would anſwer by endeavouring to check the profuſeneſs of the diſcharge, for matter when ſeparated in due quantity only, never does harm. It is the ſuperfluity which renders it of a bad conſiſtence and noxious quality, and of courſe liable to be taken up by the abſorbent ſyſtem, and to be returned into the blood. We muſt aim therefore at two points: One is to check the quantity of the diſcharge, and the other, to hinder it's re-abſorption. In the firſt intention the *cortex* with ſuitable regimen are neceſſary, in the ſecond, proper bandage and compreſs; the great and important uſes of which we ſhall explain a little more fully.

In all wounds and ulcers wherein matter is lodged, conſider what paſſes in reſpect to the lymphatic

phatic ſyſtem. There we are frequently to look for the *ſedes morbi*. Let us take the management of any old ulcer, for inſtance, and we ſhall find the diſcharge greatly differing both in quantity and quality, affecting the health of the patient accordingly. If we enjoin confinement in bed, the matter will be often abſorbed as it is in compound fractures from the ſame ſituation of the patient. But there is this material difference in reſpect to the formation of the matter, for the irritation in fractures is continually occaſioning a freſh collection, whereas in ulcers of the legs that effect ceaſes in conſequence of confinement and bandage. Now if we could uſe preſſure in compound fractures (I mean above the wound) upon the ſame principles and with the ſame propriety as we do bandages in ulcers the cure would be happily accelerated, becauſe the matter would be intercepted in the abſorbent ſyſtem and prevented from returning into the blood. Monſ. *Bilguer* ſpeaks to the ſame effect* "a moderate compreſſion of the neighbouring parts contributes to prevent the re-abſorption of purulent matter §."—An affair of very great conſequence and requiring the utmoſt attention.

If

* Page 54 of the tranſlation.

§ The doctrine of abſorption though generally received amongſt ſurgeons, is involved in ſome obſcurity. I have often had reaſon to doubt when ſymptoms of fever have been aſcribed to an abſorption of matter, that there has been in reality no matter at all ſeparated from the blood; and that the ineffectual efforts of nature to do it, are the cauſe of thoſe ſhiverings which precede the fever from ſuppoſed abſorption.

Nor

If we examine more cloſely the uſual proceſs followed in the cure of ulcers, we may perhaps deduce ſome hints to aſſiſt us in our preſent enquiry. After the firſt intentions of abating inflammation and ſoftening callous edges, by rendering the obſtructed veſſels pervious, are effected, we next endeavour to increaſe our bandage. This ſerves two great purpoſes, both by compreſſing artfully and gradually the whole arterial tube from whoſe ramified extremities matter is diſcharged, and likewiſe by ſtrengthening the lymphatic ſyſtem and preventing that eroſion which matter occaſions and that accidental abſorption which may poſſibly take place. This is the principle upon which laced ſtockings are uſed, and the ſame intention may be purſued with advantage, under proper reſtrictions, in compound fractures when the diſcharge of matter is too copious. For this purpoſe the eighteen tailed bandage deſcribed by Mr. *Pott* ſhould be made broad enough to extend from joint to joint, that compreſſes dipped in brandy and vinegar may be applied to any part of the limb, and confined with a ſufficient degree of preſſure to anſwer the end we aim at. In ſhort, the great diſcharge of matter is the principal inconvenience, and therefore the event of a compound fracture may be ſoon determined; for if the matter is mo-

Nor does this objection in the leaſt contradict the opinion juſtly entertained by anatomiſts concerning the offices of the abſorbent veſſels, which undoubtedly do convey certain fluids to the blood, though not always do they return what has been already ſeparated from it by the power of the circulation, or the *vis vitæ*.

derate

derate in quantity and decreaſes daily the caſe will be fortunate, if the diſcharge continues to deluge the limb we have reaſon to dread the conſequences.

I ſhall now mention ſome caſes as conciſely as poſſible, that from a general view the young practitioner may form an idea of the difficulty, danger, and duration of them by comparing the events.

On *July* 20, 1758, *T. E.* was brought into St. *George*'s hoſpital* with a compound fracture: both bones were broke near the ancle joint, but the wound through the integuments was not large, neither did the bones protrude, and there was no hœmorrhage.—*V. S. ſtatim.* The chief ſurgeon coming ſoon after placed the limb in a fracture box raiſed, and applied compreſſes dipped in an embrocation above and below the wound.—*V. S. repet. Hauſt. Anod.*—21. *Hauſt. Purg.*—22. *V. S.* Matter being collected amongſt the tendons the ſurgeon made inciſions on each ſide of the leg, and took out a ſplinter from the fibula —*Aug.* 8, the matter from the two inciſions having communicated under the *Tendo Achillis* a ſeton was paſſed to encourage a free diſcharge. From *Aug.* 18th. to the 31ſt. the quantity of matter decreaſed, injections were ordered in the interim, notwithſtanding which a ſinus formed and was laid open on

* The caſes at St. *George*'s hoſpital are collected and abridged from the memorandum book kept by the author while houſe-ſurgeon there in the years 1758 and 1759.—— Theſe caſes were under the direction of *David Middleton*, *Cæſar Hawkins*, *William Bromfield*, Eſqrs. and Mr. *William Hewitt*, at that time ſurgeons to the hoſpital.

*Sept.* 4.—On *Sept.* 26, a ſteel machine was ordered to ſecure the leg from injuries, and the patient was diſcharged.

*Aug.* 21. *F. F.* brought in with a compound fracture, but no protruſion of the bones or hæmorrhage—treated by the ſame ſurgeon in the ſame manner.—*Sept.* 23. *Emplaſt. Robor.*—27. Allowed the patient to ſit up.—*Oct.* 10. Diſcharged him cured.

*Aug.* 18. *J. B.* was brought in with a fracture of the os ilium.—The wound was dilated, and fomented, and V. S. and the antiphlogiſtic regimen preſcribed.—*Aug.* 28. Matter lodging, the wound was again dilated freely.—*Sept.* 2. The patient complains of a cough. *V. S.*—3. Fever very high.—4. Diſcharge ſtopped.—5. 6. 7. Seized with a troubleſome cough, owing, as I ſuppoſed, to the tendinous expanſion of the abdominal muſcles being irritated. *V. S. Linct Oleos.*—9. Great hæmorrhage from the wound.—10. *Obiit**.

*March* 15, 1759, *C. L.* brought in with a compound fracture of the leg occaſioned by a cart

* *September* 11th. On examining the body of *J. B.* I found the inteſtines in general, and particularly the *colon* at the part which lay next the wound in a ſtate of mortification. The lungs adhered to the pleura on the right ſide with appearances of diſeaſe. The right *os ilium* was fiſſured on the ſuperior ſpine, and ſome ſplinters were broke off. The wound was in a ſtate of ſphacelation. It ſeemed evident that this man did not loſe his life merely from the wound or fracture conſidered abſtractedly, but that the force which broke the ſpine of the ilium muſt likewiſe injure fatally the contents of the abdomen and pelvis by a general contuſion.

wheel

wheel running over it: the tibia was broke near the middle, the external wound was an inch in length, and though the bone did not protrude yet it preſſed hard againſt the integuments which were greatly contuſed.—16. The wound was dilated, and doſſils of lint were applied upon the ſharp extremities of the bone.—19. Fotus.—22. Shiverings.—23. Wound dilated more, matter increaſes.—24. Shiverings continue with great diſcharge.—25. Delirium, pulſe quick, ordered *opium* in doſes of one grain frequently repeated, which relieved the delirium; the wound offenſive.—26. Shiverings, ordered *Cort. Peruv.* with *Conf. Card.*—28. Shivering fit returned violently.—30. *Obiit**.

*April* 3, *F. A.* brought in with a compound fracture of the leg. The tibia was broke and ſplintered juſt above the ancle, and the lower extremity of the fibula likewiſe, both being forced through a large wound in the integuments. Amputation was performed below the knee, the operator uſing the artery forceps to draw out the blood-veſſels, and enable him to avoid incloſing the nerve with the ligature. The patient had violent pain after the operation, and ſome hæmorrhage. *V. S.*—5. *Delirium* and pain laſt night. *V. S.* in the evening —6. Stump ſwelled, but little diſcharge.—7. *Delirium* laſt night. After eating his breakfaſt

* *April* 1ſt. The body was opened but no diſcovery made of the apparent cauſes of death.

with a kind of convulsive eagerness he suddenly expired †.

*April* 26. A boy was brought in with a compound fracture of the *os Humeri* just above the elbow. The method of treatment succeeded very well in every point, and on *May* 17, he was discharged cured.

*May* 1. A man brought in with a compound fracture of the leg: the wound large and near the ancle. *V. S.*—2. *V. S.*—3. *V. S.*—5. *V. S.*—9. *V. S.* the wound dressed lightly with compresses dipped in brandy above and below.—10. Spasms and starting which displaced the limb: ordered *opium* in doses of one grain occasionally.—11. Better.—*July* 11th. Cured.

*May* 18. A man came to the hospital with a contused wound on the elbow from a hedge stake, the parts were much swelled. *V. S. Mixt. Purg. Catapl. Discut.*—19. The surgeon made an incision and discovered the olecranon to be fractured in so bad a manner as to draw from him an unfavourable prognostic.—20. *V. S. Fotus. Catapl. Opium, Mixt. Purg.* occasionally.—22. *V. S.*—24. Some small splinters of bone removed.—26. Inflammation, tension, and fever in a very high degree; pulse languid, discharge thin.—27. 28. Delirium.—29. 30. 31. Tension, pain, and delirium in spite

† *April* 7th. Upon examining the body of *F. A.* I found an inflammation and adhesion on the right lobe of the lungs, but no appearances sufficient to account for his death—perhaps the irritation on the nervous system was the cause.

of

of all remedies and applications.—*June* 1. A very deep and bold inciſion made upon the tumified part, and ſome matter diſcharged.—2. Tenſion and inflammation abated; patient very low; the diſcharge copious —3. Profuſe ſweats.—6. *Obiit.*

*Aug.* 20. A young man came into the hoſpital who by a fall from a coach-box had received a very great contuſion on the elbow: *V. S. Catapl. Opium. Hauſt. Purg.*—21. The ſwelling being abated the *Olecranon* was upon examination found to be fractured.—22. The patient reſtleſs, and was always throwing his arm about very violently, though properly attended and cautioned to keep it ſtill. *V. S.*—23. Early this morning the patient was ſeized with a delirium which increaſed to a ſurpriſing degree in a few hours. Judging it to proceed from irritation, recourſe was had to *opium* in large doſes, by which means the delirium was abated, but in the evening he was ſeized with convulſions and died *.

*Sept.*

* On diſſecting the arm I found the *Olecranon* broke obliquely and much ſplintered: The ligament of the joint was lacerated together with the head of the *Anconeus* muſcle, and the ulnar nerve had conſequently been injured. There was great extravaſation amongſt the muſcles all up the limb, and from the violence of the fever the body was rendered extremely putrid.

And here I muſt obſerve that no caſes are more dangerous than injuries of the joints, and none more diſagreeable and indeed diſreputable to the ſurgeon, who if he is lucky enough to ſave his patient yet generally ſuffers in his credit. Every deformity and inconvenience which remains is attributed to unſkilfulneſs,

*Sept.* 6. A woman brought with a compound luxation. The foot was turned inwards and both bones were thruſt through the ſkin at the outer ancle. The *Tibia* had forced the *aſtragalus* along with it under the tendon of the *extenſor muſcle**. On the 7th amputation was performed, but the operation proved unfortunate, for on the 17th ſhivering fits came on, and on the 23d the patient died.

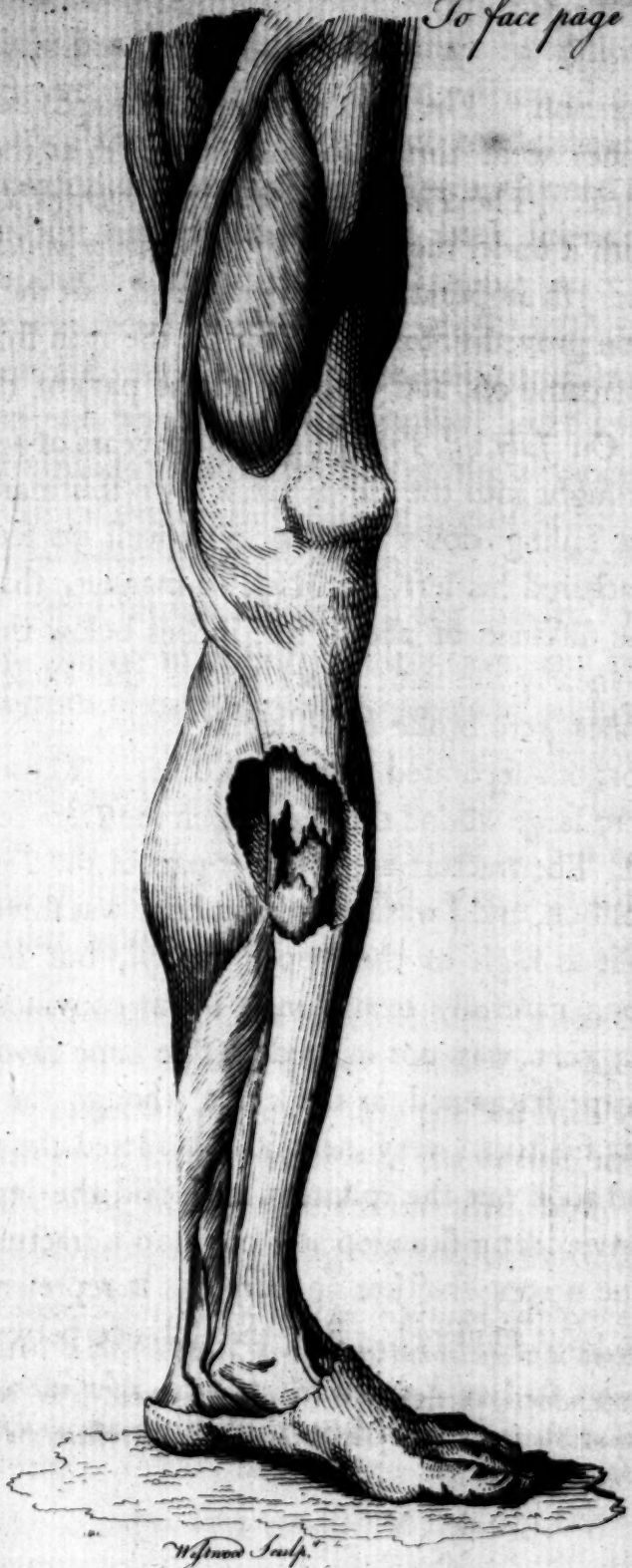
On *July* 15, 1768, a man (60 years of age) was brought into the *Birmingham* town-infirmary, who by falling down into a draw-well 90 feet deep fractured his left leg in ſuch a manner, that from the diſtance of about five inches below the knee to nearly the ſame ſpace above the ancle, both bones were broke in different places, and ſeveral portions ſeparated from each other. There was a very large wound through which the *Tibia* protruded. The fracture at the upper part of the *Tibia* was oblique, and I was fearful that bone was ſhivered or ſplit as high as the upper condyl, but however upon carefully examining, I was convinced that the joint was not injured. The ſame favourable eſcape happened at the ancle, though the fibula was fractured very near it. I dilated the wound and took out the ſplinters, and laid the leg in as convenient a ſituation as I could in a fracture-box. The upper fracture appeared as is repreſented in the plate annexed. But the diſtance between the

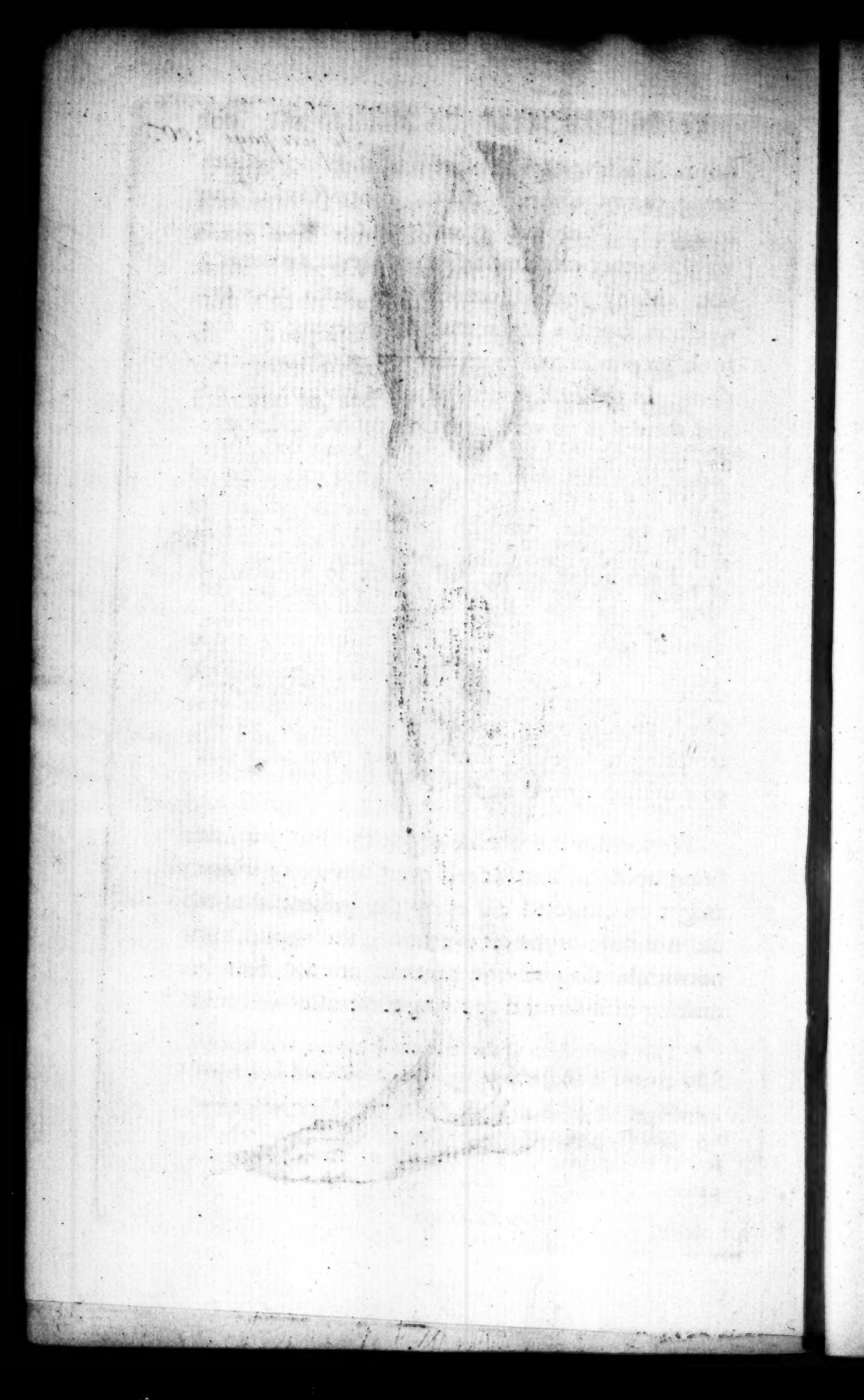
unſkilfulneſs, though in theſe circumſtances it is frequently impoſſible to prevent an *Anchyloſis*, or to reſtore the free uſe of the limb.

* Vid. Medical Miſcellany, pape 121.

bones

To face page 200.





bones in a few days became leſs, their extremities being drawn together by the contraction of the muſcles *. The firſt grand point to determine was, whether amputation ſhould be performed or not. Many reaſons occurred on both ſides the queſtion, but the arguments for keeping on the limb preponderated from the following conſiderations: In the firſt place, the joints were uninjured and there was no very great contuſion, and ſcarce any hæmorrhage; and again, though the advanced age of the patient might be urged as an objection, yet on the other hand his conſtitution was ſtrong and his ſpirits remarkably good; the opinion too of Monſ. *Bilguer* in reſpect to theſe caſes, and the remembrance of many examples quoted by authors wherein the bones had been, beyond expectation, united, and deficiencies and loſs of ſubſtance ſupplied, pleaded very ſtrongly in favour of our attempting to ſave the limb, which was after due conſultation agreed upon.

We foreſaw the trouble which this lenity would bring upon us, and indeed every difficulty which might be expected did every day preſent itſelf to us. A deluge of matter overflowed the wound, and notwithſtanding all the precautions uſed, both in making inciſions and applying compreſſes we could

* This contraction of the muſcles is always very powerfully exerted in all fractures, and is beſt remedied in a flexed poſition of the limb. As to Mr. *Wathen*'s machine I dare not apply it on account of the contraction of the muſcles, for fear of giving pain: It is uſeful chiefly for removing the patients.

not

not prevent the miſchiefs which happened. A recital of each minute proceeding would be tedious: ſuffice it ſay, that after 12 weeks ſufferings, ſymptoms of abſorption came on, and I found it neceſſary to amputate above the knee at laſt. The operation was performed on *October* 10th. The ſtump healed tolerably well, but unfortunately the patient fell ill of a fever and died on *January* 12, 1769 *.

From theſe foregoing remarks and caſes it will appear how difficult and uncertain all our deciſions prove in compound fractures. It is ſaid that country practitioners have in general better ſucceſs then hoſpital ſurgeons in treating theſe accidents, but to what this ſucceſs is owing I cannot ſay, unleſs the difference of air gives the advantage. Nor is the fact itſelf abſolutely certified, becauſe the proofs muſt depend upon an exact compari-

* I will add an obſervation or two in a note.—I have found in amputations when the blood of the patient is very thin, troubleſome and dangerous hæmorrhages enſue from the whole ſurface of the ſtump. Several methods have been recommended to obviate this inconvenience, ſponge has been tried, but it proves ſometimes inſufficient and creates much difficulty by mixing with the fleſhy fibres. The beſt prevention is by rollers paſſed round the body and carried down the thigh, with a compreſs all along the crural artery. This preſſure may be increaſed or ſlackened *ad libitum*.—In compound fractures I have obſerved oily particles amongſt the matter diſcharged, theſe probably are from the cellular ſubſtance diſſolving. In wounds this appearance has been reckoned by ſome old ſurgeons as a *ſignum ſanandi*, but for what reaſon I know not.

ſon

ſon in reſpect to the number of caſes in each ſituation, which has not yet been made. As to care, ſkill, convenience, and every other requiſite for the welfare of the ſick, hoſpital-practice muſt ſurely claim the preference.

We ſee upon the whole that the propriety of our determinations in every doubtful exigence cannot be aſcertained by the events. In the laſt mentioned inſtance we acted from the ſtrongeſt conviction of doing right, of doing for the patient what we would have done for ourſelves under the ſame circumſtances. Had we proceeded otherwiſe and taken the ſhorteſt and eaſieſt method, that of amputation, whilſt there was a probability of ſaving the limb, though our practice might have been more ſucceſsful I cannot think it would have appeared quite ſo juſtifiable, or conſiſtent with the rules of chirurgery and humanity.

## *Succinct account of the ſtate of diſeaſes in* Birmingham *in* 1768.

IT is obſervable in general that the ſituation and air of *Birmingham* render the town very healthful, and that the employment of the working people does not expoſe them to diſeaſes or accidents, but is rather a means of their preſervation from both, except in the guilding and painting buſineſs from the uſe of mercury and lead; and theſe branches bear but a very ſmall proportion comparatively with the reſt. Epidemical diſtem-

pers rarely infeſt this place, and there is none that can be ſtrictly called endemial, therefore the mortality is not ſo conſiderable as might be expected from the multitude of inhabitants*.

The beſt and ſureſt method of forming an eſtimate concerning the prevailing diſeaſes at any time in any populous town, is to examine the ſtate of health amongſt the poor: for this claſs of people from their circumſtances and ſituation, deſtitute of proper nouriſhment and convenience, crowded too much together in cloſe habitations, are unavoidably moſt expoſed to every inſalutary influence of the atmoſphere, and conſequently feel the firſt effects of any epidemical conſtitution in the air, that can infect human bodies. The ſtate of the poor in reſpect to diſtempers, is therefore the criterion by which we are to determine the ſtate of health in general, for as to private practice it is divided into too many hands to allow us to make from the reports of individuals ſuch calculations as can be depended upon.

If we are to judge from this principle, it will appear that the town of *Birmingham* was very healthy during the year 1768. There was indeed a continual ſucceſſion of wet weather which in the country was productive of putrid diſeaſes to a great degree, but this infection did not reach the town. The number of fires conſtantly kept here both for convenience and for carrying on the manufactures, did

* *Birmingham* is ſuppoſed to contain about 40,000 Inhabitants.

moſt

moſt probably contribute to the ſafety of the people: at leaſt I could aſſign no better reaſon to account for that remarkable difference in reſpect to diſtempers which was apparent in town and country in the courſe of the year now mentioned. The ſick-liſt for the paupers was much inferior in number to what former years have produced; in the year 1766 the town relieved 1022 ſick objects, viz. in-patients 270—out-patients 752—but not near ſo many in 1767, and in 1768 fewer ſtill. The ſame hitherto may be ſaid of the year 1769 for in this preſent month of *June* there is not above four or five upon the out-patient liſt; but the number is always fluctuating.

The diſeaſes of the paupers here ariſe chiefly (as is the caſe in all manufacturing towns) from bad diet, uncleanlineſs, and cloſe crowded rooms, the conſequences of that diſtreſs which intemperance and a wrong uſe of the produce of labour occaſion, rather than any real want: and in general theſe diſeaſes become of a putrid nature. Hence it happens that reports are frequently ſpread of epidemical fevers prevailing, when no ſuch diſeaſes exiſt in the place, except in appearance only from the above-mentioned cauſes. The cure of theſe diſtempers conſiſts more in management and regimen, than in medicine. Remove the ſick to the infirmary, allow clean linen and good beds, with gruel and ſuitable nouriſhment, and they ſoon recover. Our *Pharmacopeia Pauperum* contains but few medicines, remarkable rather for uſe and

efficacy than for pomp and form. Very few accidents happen here notwithſtanding the populouſneſs of the place and it's environs. There are ſome diſeaſes which we ſcarce ever ſee, particularly the ſtone: not one inſtance has occurred amongſt the paupers for the ſpace of nine years, while I have been employed as ſurgeon to the infirmary. I ſuppoſe the exemption from this torturing malady, is owing to the quantity of mild malt liquor uſually drank here by the loweſt of the people. But this beverage, if it does not produce the ſtone, when taken in exceſs brings on other diſeaſes equally fatal though perhaps ſlower in their progreſs, and more deluſive in their effects.

In the treatment of fevers in the infirmary I have found good effects by obſerving the cool regimen, as recommended by the beſt practitioners*.

I thought that pulmonary complaints occurred more frequent than uſual in the year 1768, but whether from that general ſcrophulous diſpoſition prevalent amongſt the poor, or from any effects of the wet ſeaſon I could not determine.

Theſe are the moſt material obſervations which the ſtate of health gave riſe to, there was nothing

* Here I beg leave to recommend an improvement in reſpect to liquors drank in putrid fevers; inſtead of *toaſt-water* let a very ſlight cold infuſion of the Peruvian bark be made in the proportion of half an ounce of bark to two quarts or five pints of water, to be drank cold; it proves an agreeable beverage and aſſiſts in all intentions where the bark is proper. This hint is taken from the ingenious Dr. *Vaughan*, of *Leiceſter*.

remarkable

remarkable produced, and conſequently the deſcription cannot be very intereſting. Future years in ſo large a place may perhaps furniſh more ample matter for medical enquiry and diſquiſition.

## *Epitome of Anatomical Lectures.*

——VELUT ITER MONSTRANTE.

THE maxim—*divide & impera*, is equally juſt in ſcience as in politics: and in no branch is it more applicable than in anatomy. The mind upon a general view of the wonderful and complicated ſtructure of the human body, ſeems to have it's powers ſuſpended in aſtoniſhment, and deſpairs of arriving to a knowledge of that intricate machinery which infinite wiſdom hath framed. But this gloom of deſpondency vaniſhes by degrees, when we begin with the firſt principles and ſeparate the parts which compoſe the ſtupendous whole, taking them to pieces one by one, arranging them in proper order, and examining each of them diſtinctly. Diligence then ſurmounts all difficulties, combinations are diſentangled, the gradual improvements of ſucceſſive ages are explained, and by an attention to nature and the aſſiſtance of authors, the object becomes more and more familiar and agreeable. Some will often atchieve by labour and induſtry what by natural genius they could never attain. He that is not capable of making new diſcoveries, may by dint of application and practice learn to trace thoſe lines which

which others have drawn. Actuated by theſe ſentiments, and by a deſire of inſtructing the young gentlemen of the faculty educated here, a courſe of anatomical lectures was attempted at *Birmingham*, during the winter ſeaſon, upon the following plan.

*Hippocrates* having divided the human body into ſolids and fluids, the whole may properly be deſcribed according to *Heiſter* under theſe general heads.

OSTEOLOGY,
SARCOLOGY,
SPLANCHNOLOGY,
ANGIOLOGY,
NEUROLOGY,
MYOLOGY,
ADENOLOGY.

This was the order laid down, though it muſt be obſerved that it is impoſſible to purſue it exactly, or to treat of each diviſion altogether ſeparately and independently of the reſt, on account of that connexion which one part hath with another, and the neceſſity of varying the ſubject now and then as opportunities of procuring bodies occur. Theſe reaſons will ever occaſion ſome diverſity in the method of teaching anatomy, but though we may be obliged to wander irregularly in this extenſive field, yet at length we may take a juſt ſurvey of the whole.

As I attempted only to find the parts and to exhibit a view of them, I was ſenſible that the ſubject

ject could receive very little illuſtration from my labours, and therefore it became neceſſary to ſelect the beſt authors as guides and inſtructors to myſelf and others in this undertaking. *Iyſerus* in his Cultrum Anatomicum has attempted to ſhew the method of diſſecting the body, but his work is very irregular and imperfect, and it is to be wiſhed that ſome able anatomiſt would ſupply this deficiency. In reſpect to deſcription and accuracy the indefatigable *Winſlow* deſerves the preference; in phyſiology *Haller*. Other authors of eminence who flouriſhed in the laſt as well as the preſent century may be conſulted with great advantage, namely, *Harvey*, *Bartholin*, *Gliſſon*, *Lower*, *Willis*, *Pecquet*, *Malphigi*, *Keil*, *Ruyſch*, *Heiſter*, to which we muſt add *Hunter*, rendered famous by thoſe lectures from which thouſands have been inſtructed. Many of theſe authors were academics, men celebrated for claſſical erudition as well as anatomical ſkill, who purſuing with equal ardour and ſucceſs the track diſcovered by *Harvey*, have made great and valuable improvements in this ſcience.

In deſcribing any particular part or branch of anatomy, I always chuſe to follow that author who has wrote more expreſsly on the ſubject in queſtion: for inſtance, in oſteology *Monro*, in the hepatic ſyſtem *Gliſſon*, in the myology *Douglas*, it being reaſonable to ſuppoſe that their abilities and attention confined to one point, would of courſe be exerted with more vigour and effect. For much

the

the ſame reaſon I prefer the accounts given by the original diſcoverers in explaining the objects of their enquiries, as *Pecquet* in the *Ductus Thoracicus*, and others, becauſe as they were animated with ſome degree of enthuſiaſm their deſcriptions are more lively and exact.

Juſtly conſidering the lectures given here only as a preparatory ſchool in which the pupils might qualify themſelves for a better, by having terms of art explained, and proper authors recommended, together with a familiar view and deſcription of the different parts of the body, I endeavoured to be as conciſe as poſſible. The whole ſcheme was included in twenty-eight lectures delivered weekly: the particulars of which when enlarged and corrected by the experience of another courſe, if time will permit, may perhaps be publiſhed upon ſome future occaſion. In all large towns wherein a number of young ſurgeons are educated, a deſign of this nature will be found uſeful, and therefore this is mentioned as an example only, of what may be done with more advantage and ability by others, eſpecially in the theatres of hoſpitals.

## * *Caſe of an uncommon Tumour.*

A Lady about thirty years of age who from her infancy had been often ſubject to inflammatory complaints, had, about five years ago, a ſevere rheumatic fever which continued two or three

* Communicated by an eminent ſurgeon.

months.

months. After her recovery ſhe grew very fat, but remained at times frequently indiſpoſed with loſs of appetite, dejection of ſpirits, and an inability to bear much exerciſe.—Upon her return from a journey in *Auguſt* 1767, ſhe complained of a pungent pain below the ſhoulder-blade whenever ſhe lay in bed.—Upon examination a tumour about ſix inches long and three inches broad of the ſize and ſhape of half a melon was very evident on the left ſide between the ſcapula and the vertebræ, extending itſelf below the ſcapula.—A fluctuation of ſome fluid was very perceivable, though the integuments were not thin but the tumour felt remarkably cold, like a bladder of cold water.

In hopes that this tumour might be of ſervice to her complaints in general, various methods were made uſe of to bring it to a ſtate of maturation.—Penetrating liniments and warm irritating plaiſters were applied but to very little purpoſe: the liniments would not lie on the part but run off in a curdled form, and plaiſters though of ever ſo adheſive a quality when applied to other parts of her, would not however ſtick upon this tumour. Finding it in vain to expect much from applications, it was determined that they ſhould be left off, and the tumour rubbed twice a day with a fleſh bruſh, the uſe of which was likewiſe diſcontinued after a time as it produced no alteration.—In the *February* following, ſhe was ſeized with a ſevere troubleſome cough, attended with a pain of the ſide, and between the ſhoulders.—The

uſual methods relieved the cough, but upon examining the part where the tumour was ſituated, no remains of it could be found, nor was there any pain upon preſſure.

She went into the country, but found her appetite for food grew daily worſe, particularly after exerciſe. She had tranſient pains all over her, which after three months fixed in her feet, and became ſo very excruciating as to be relieved only by opiates.—Her ſtomach and breathing were often affected, and were eaſed only by the uſe of *philon. lond.*—In this manner ſhe continued for the ſpace of between two and three months when being worn out with pain and loſs of ſtrength ſhe died in *Auguſt* 1768.

As the tumour on the back had vaniſhed ſo long before her death, there was no permiſſion given to make an inciſion into the part to examine whether there was any cyſt or other appearance to determine the nature of it.

*An Eſſay on Salep, by* S. F. Simmons.

Biſhop's-Gate-Street Without, 1768.

THE inhabitants of *Turkey*, *Perſia*, and other parts of the Eaſt have long eſteemed Salep as a powerful reſtorative, and conſiderable quantities of the root have been conſumed by thoſe nations. Their example has been much, though not ſo generally imitated by the *Engliſh* ſince the firſt introduction of *Salep* into this part of *Europe*. We receive

receive it from *Turkey* in roots, which, though poſſeſſed of no ſmell afford an inſipid taſte not very different from that of *Gum Tragacanth*: and on a nice enquiry between *Salep* and the *Orchis* of our own country, and a critical examination of their reſpective qualities, the virtues of each appear to be in ſome degree ſimilar. Several botanical writers have given, on account of this reſemblance, to both the appellation of *Orchis* with proper diſtinctions: the ſpecies of *Orchis* or *Satyrion* being numerous; but that ſpoken of here as ſimilar to *Salep* is the male: the ſkin of which being taken off by a maceration of the plant in warm water, the root is ſuſpended and dried in the air*: after this preparation it is converted, as is *Salep*, by the aſſiſtance of hot water into a mucilage.

*Serapias*, *Salep*, *Saleb*, or *Salop*, as it is differently written by different authors, is to be procured and ſeen growing in various parts of *Turkey*, *Perſia*, and *Syria*; but found in the moſt conſiderable quantities, as *James* aſſures us, not far from *Conſtantinople* on the mountains of *Burſia*; and as it neceſſarily paſſes through ſeveral hands before it reaches us, is often counterfeited by roots, which, when dried, reſemble it in external appearance, without poſſeſſing its reſtorative quality; and the compoſitions daily ſold in the ſeveral ſtreets of *London* by its name, are no other than decoctions of cheap, and *perhaps*, wholeſome woods rendered palatable by ſuitable additions.

* New Diſpenſatory.

From the *Turks* who firſt made uſe of this plant the *Engliſh* have copied the methods of compounding it in order to render it agreeable to the palate: and for that purpoſe we find it often mixed with milk, ſugar and aromatic ſpices with wine or orange juice.

The powder of the root diſſolves by the aſſiſtance of heat alone, and in cold water or proof ſpirit it ſubſides to the bottom: by experience hot water gradually applied, proves a menſtruum the beſt adapted to it. A tea ſpoonful of the powder is a quantity ſufficient to inſpiſſate half a pint of water.—Thus diſſolved it appears to be well diſpoſed for aſſimilation, and to that end requires but a feeble aſſiſtance of the digeſtive powers; hence the reaſon is apparent why in a ſtate of debility, this and other liquid aliments, as broths, jellies, &c. beſt correſpond with the efforts of nature, and prove the moſt nouriſhing.

*Geoffroy* has recommended *Salep* in dyſenteries; a recommendation which its tenacious and lubrificating qualities ſeemed without doubt to entitle it to.

As it produces no effervеſcence when combined with an acid or alkaline matter, its property of obtunding acrid particles lodged in the primæ viæ evidently appears: thus copious and frequent draughts, of which Salep muſt be the baſis, may be preſcribed with advantage in all diſorders ariſing from a ſpontaneous acid or alkaline cauſe.—In

which

which the fluids degenerate gradually from their healthy and balſamic to an acrimonious and corroſive nature.—Hence the containing veſſels from the impurity of the humours circulated through them and a conſequent diminution of their due nouriſhment become leſs elaſtic and in the capillary veſſels a total abraſion enſues.—The powder has been preſcribed ſucceſsfully to children in doſes properly increaſed to the age of the patient to be taken twice a day; and acidities in the primæ viæ have been removed by its means. The *Turks* have regarded it as capable of exciting venery and preventing abortion.—Suppoſitions, I believe, not ariſing from experience but imagination.—The nutritive power which *Salep* poſſeſſes, beſpeakes the advantage thoſe perſons may expect to receive from a continued uſe of it, who labour under a decay of conſtitution or are by any means enfeebled; it may be drank for breakfaſt inſtead of tea*.

*General*

☞ By a note from a gentleman whoſe intelligence cannot be diſputed, I am informed that the practice of placing a fractured limb in a flexed poſition was begun by Mr. Girle, of St. *Thomas*'s hoſpital, twenty years ago.

* A correſpondent who ſigns himſelf *Miſopſeudos*, after inveighing with ſome juſtice againſt the frauds of itinerant druggiſts, propoſes a compendious review of the *Materia Medica* in order to point out the true qualities of each drug and to detect impoſitions. This gentleman under the article *Cortex Peruvianus* obſerves, that, "a few years ago a ſpurious bark was imported from *America*, very like the true Quinquina; but the college of phyſicians being apprized of the fraud, publiſhed a caution againſt it, which deterred the druggiſts for a time from vending a drug recently condemned

## *General remarks on medical books in* 1768 *and* 1769.

THAT the ſtrict maxims of prudence by which individuals ſhould be influenced, are ſometimes inconſiſtent with public utility, is an obſervation verified in the caſe of medical authoriſm. For no man who conſults his own intereſt, his eaſe, or his fame would write in the profeſſion of phyſic, at a time when knowledge is become more

demned *ex Cathedra.* However, the *Spaniſh* war breaking out, the price of bark was ſo much advanced as to tempt the druggiſts to mix this ſpurious ſort with the true, to the great diſappointment of practitioners in phyſic."—Some further intelligence of this nature will be acceptable from *Miſopſeudos* who deſerves the thanks of the faculty, and I am ſorry there was not room to inſert the whole of his letter.

In this note I muſt likewiſe take notice of another correſpondent who has ſent ſome more queries. As to his queſtions concerning the gout, I muſt refer him to authors. *Lieutaud's Synopſis* will afford him ſome ſatisfaction.

Firſt Problem. Why mercury rubbed down and divided into as fine globules or parts with calcareous earth (as in the Merc. Alcal.) is not as active a medicine as it is when divided by any viſcid ſubſtance as Saliva, Gum. Arab. &c. this latter, experience tells us is a very powerful medicine in the venereal diſeaſe; whereas the other has but little effect?

Second. How are we to account for a ſmall quantity of blood evacuated from the noſtrils, &c. curing internal inflammations, pleuriſy, &c. when twenty times the quantity from the arm does not effectually relieve?

*** *The letter ſigned* A. B. *from the Newcaſtle Coffee-Houſe, Billingſgate, could not be attended to in the manner the writer requeſted.*

general,

general, and men brought more to a ſtate of equality by the opportunities of improvement which public lectures and hoſpitals afford. But then the world would be deprived of many uſeful productions, if the timidity and caution ariſing from a proſpect of the numerous difficulties medical authors muſt encounter, were to prevail. The very nature of their taſk will not admit of thoſe ornaments and figures which happily are made uſe of, to render other compoſitions ſucceſsful; invention cannot enliven the work with it's ſtriking novelties, and the fire of genius becomes extinct in the meer narrative of dry facts and dull experience. The medical writer riſks his reputation, ſacrifices his time, and incurs expence by his labour. Nor are theſe all the miſchiefs to which he is expoſed; a tribe of anonymous critics will ſometimes wantonly attack him.

Necdum etiam *geminos a tergo* reſpicit *angues.* Omnigenumque Deum monſtra, & *latrator Anubis* Tela tenent. Virg. Aen. 8.

Under all theſe diſadvantages he is ſurely entitled to the candour, indulgence, and protection of the public.

In reſpect to the new phyſical books in 1768 and 1769, I can at preſent inſert only their bare titles in the note below*, marking ſuch of

* The following are all the medical books which have come to my hands as publiſhed in 1768 and part of 1769.

1768.—A full and plain account of the gout. By F. Warner. *Medical

of them as I think deſerve the moſt attention. And now I conclude this volume with declaring the conſcious ſatisfaction I feel in endeavouring to ſet an example of induſtry and application at leaſt, although I may perhaps be reckoned by ſome amongſt the number of thoſe writers whoſe zeal hath exceeded their abilities.

*Medical tranſactions. By the college of phyſicians.
*Formulæ Medicamentorum. By H. Smith, M. D.
*Gooch's Surgery, 2 vols.
A Diſſertation upon the nerves. By W. Smith, M. D.
Syſtem of Phyſic, quarto. By the ſame.
Eſſay on Fevers. By Dr. Chalmers.
**On the Diſeaſes in hot Climates. By Dr. Lind.
On Inflammations. By Dr. Magenſie.
Libellus de Scorbuto. By Dr. Hulme.
*On the Dropſy of the Brain. By Dr. Whytt.
*On puerperal Fevers. By Dr. Denman.
*Eſſays Experimental, &c. By Mr. Alexander.
A Treatiſe on the Teeth. By T. Beardmore.
Dr. Haen's Ratio Medendi, vol. XI.
An Anſwer to Mr. Kirkland's Eſſay. By Mr. Maxwell. 1769.—Mr. Kirkland's Reply, by way of Dialogue.
Remarks on Warner's Account of the Gout. Anon.
A Compendium of Phyſic and Surgery. Anon.
A Treatiſe on Fevers. By J. Gibſon, M. D.
An Eſſay on Acids. By Dr. Farr.
*Remarks on Fractures and Diſlocations. By P. Pott.
*Experiments and Obſervations on Water. By Dr. Percival.
**Obſervations on the Aſthma, &c. By Dr. Millar.
Thoughts on Brightelmſtone and ſea bathing. By Dr. Awſitter.
*A Treatiſe on the gout. By Dr. Caverhill.
Practical Treatiſe on the Scurvy. By Dr. Jervey.
On the Endemial Colic of Devonſhire. By T. Alcock, M.A.
An Eſſay on the Bronchocele. By T. Proſſer.
*Phyſiological Eſſays. By Dr. Stedman.
Goulard's Treatiſe on the Effects of Lead. Tranſlated.

F I N I S.

BRITISH 22 AP MUSEUM